

AIRCRAFT ACCIDENT REPORT
OPNAV FORM 3750-1A (Rev. 3-63) Page 1SPECIAL HANDLING REQUIRED in accordance with
Para. 66, OPNAV INSTRUCTION 3750.6, effective 10 March 1963

OPNAV INSTRUCTION 3750.6

PART 1 GENERAL

1. AIRCRAFT ACCIDENT BOARD APPOINTED BY COMATKCARAIRWING FIVE	2. SERIAL NO. HO-1 DET31 1-70A	3. DTG (LOCAL) OF MISHAP 101635R AUG 69	4. MODEL AIRCRAFT UH2C	5. BUREAU NUMBER 149767
6.	*	9. LOCATION OF MISHAP Position Classified	10. DAMAGE ALFA	
TO: Commander, Naval Aviation Safety Center		11. TIME OF DAY DAY	12. TIME IN FLIGHT 0115	13. FLIGHT CODE JM
7. VIA COMATKCARAIRWING FIVE USS BON HOMME RICHARD (CVA-31)		14. CLEARED RC FROM CVA-31 TO CVA-31		
OFFICER SEVEN COMPANY ONE HC-1 COMNAVAIRPAC		15. TYPE CLEARANCE UFR	16. AIRSPEED 30kts "P"	17. A/C WEIGHT 11,000
18. BRIEF DESCRIPTION OF MISHAP Loss of control during hover entry over water		19. ELEVATION AT TIME OF MISHAP At Sea Level TERRAIN Water		

20. LIST MODEL NUMBER, REPORTING CUSTODIAN AND DAMAGE CLASSIFICATION OF ANY OTHER A/C INVOLVED (Complete OPNAV Form 3750-1 for each A/C)

*	SECTION A. IDENTIFICATION	SECTION B. CONTRIBUTING FACTORS	SECTION C. PERSONNEL DATA	SECTION D. PILOT EXPERIENCE IN HOURS	SECTION E. OTHER PERSONNEL
	1. PILOT ERROR IN TECHNIQUE/JUDGMENT	9. SERVICING PERSONNEL	17. WEATHER		
	2. PILOT DEVIATION FROM NATOPS PROCEDURES	10. LANDING SIGNAL OFFICER	18. DESIGN AIRCRAFT		
	3. PILOT INCORRECT OPERATION OF A/C SYSTEM	11. OTHER PERSONNEL (Specify)	19. DESIGN CREW EQUIPMENT		
	4. PILOT OTHER (Specify)	12. ADMINISTRATIVE	20. DESIGN OTHER (Specify)		
	5. CREW	13. FACILITIES-RUNWAY, OVERRUN TAXIWAY FLIGHT DECK	21. ROLLING/PITCHING DECK ROUGH SEAS		
	6. MAINTENANCE PERSONNEL	14. FACILITIES-NAV AIDS, LANDING AIDS (OGA, CCA, ILS, MIRROR)	X 22. MATERIAL FAILURE/MALFUNCTION		
	7. MAINTENANCE SUPERVISORY PERSONNEL	15. FACILITIES-CATAPULT, ARRESTING GEAR (Ship or Field)	23. UNDETERMINED		
	8. SUPERVISORY OTHER (Specify)	16. FACILITIES OTHER (Specify)	24. OTHER (Specify)		

1. NAME (Last, first, & middle initial)	2. RANK/ RATE	3. FILE NO.	4. SERVICE NO.	5. DATE OF SERVICE	6. AGE	7. DTG (Local)	8. DUTY	9. POSITION	10. GCODE
PILOT (not controls at time of mishap) (b) (6)	LT	(b) (6)	1315	USNR	27	2	Pilot	Cockpit	G
CO-PILOT (Identify & submit separate page 1) LOVELL, John R.	LTJG	712581	1315	USNR	25	1	Copilot	Cockpit	G

ITEM	ITEM	ITEM	ITEM	ITEM			
11. ALL MODELS	793	17. CY LANDINGS DAY/NIGHT	ALL	277 / 48			
12. ALL MODELS IN LAST 12 MONTHS	245	18. FC/LP LANDINGS LAST 6 MONTHS DAY/NIGHT	IN MODEL	277 / 48			
13. ALL MODELS IN LAST 3 MONTHS	80	19. INSTRUMENT HOURS LAST 3 MONTHS ACTUAL/SIMULATED	ALL	4 / 3			
14. ALL SERIES THIS MODEL	A/C 558	20. NIGHT HOURS LAST 3 MONTHS	IN MODEL	4 / 3			
15. ALL SERIES THIS MODEL LAST 12 MONTHS	OFT/CPT NA	21. TOTAL HOURS IN JETS (of jet mishap) HELOS (of helo mishap)	ALL	10			
16. ALL SERIES THIS MODEL LAST 3 MONTHS	A/C 245	22. SPECIAL HANDLING REQUIRED LAST 12 MONTHS ALL SERIES THIS MODEL ACCORDING WITH DURATION	IN MODEL	643 8/9/69 1			
22. DATE/GRADE LAST NATOPS STANDARDIZATION CHECK	27 JAN 69 QUA1	24. OPNAVINST 3750.6 SERIES TYPE INSTRUMENT CARD	STANDARD				
25. NAME (Last, first, & middle initial)	26. RANK RATE	27. DATE OF SERVICE	28. FILE NO.	29. DTG	30. DUTY	31. POSITION	32. GCODE
(b) (6)	AN	USN	(b) (6)	HO-1	G	Crew	Cabin
(b) (6)	ADJ2	USN		HC-1	B	Crew	Cabin

OP-02

HC-1 DET 31/3750

Ser 32

13 SEP 1969

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES
FOR OFFICIAL USE ONLY

FIRST ENDORSEMENT on HC-1 DET 31 AAR Ser 1-70 A concerning UH2C 149767
occurring 10 AUG 69, Pilot (b) (6)

From: Officer-in-Charge, Helicopter Combat Support Squadron ONE
Detachment 31
To: Commander, Naval Safety Center

Via: (1) Commander, Attack Carrier Air Wing FIVE
(2) Commanding Officer, USS BON HOMME RICHARD (CVA-31) -
(3) Commander, Carrier Division ONE -
(4) Commanding Officer, Helicopter Combat Support Squadron ONE -
(5) Commander, Naval Air Force, Pacific -

Subj: HC-1 DET 31 AAR 1-70 A

1. Forwarded, concurring with the conclusions and recommendations of the board.

2. There are several possibilities as to the cause of this accident. From the information supplied by the two witnesses and the sequence of events, the theory of a failure in the collective control system appears to be the most probable. If this was the reason, then the recommendation to x-ray the rotor blades may be unnecessary. However, with the slightest possibility that blade/flap failure initiated the accident then x-raying is in order. Accordingly, instructions for the specific technique of x-raying the blades are requested.

3. The practice of the "swimmer" aircrewman flying without his normal survival equipment attached has been discontinued. In the majority of rescues, the swimmer should have time to remove this equipment and strip for water entry.

(b) (6)

(b) (6)

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

AIRCRAFT ACCIDENT REPORT
OPNAV FORM 3750-1A (Rev. 3-63) 1

SPECIAL HANDLING REQUIRED as accordance with
Para. 6G, OPNAV INSTRUCTION 3750-1A, latest edition.

REPORT DRAFTED FROM

PART 1 GENERAL

1. AIRCRAFT ACCIDENT BOARD APPOINTED BY COMINCH AIRCRAFT FIVE	HOSPITAL PLANE 1-70A	2. DATE LOCAL OF MISNAP	3. MODEL AIRCRAFT	4. REGISTRATION
		101635H AUG	UH2C	149767

SECTION A IDENTIFICATION TO: Commander, Naval Aviation Safety Center 7. VIA:	8. DATE	9. LOCATION OF MISNAP	10. TIME OF FLIGHT	11. FLIGHT CRAFT
		14. CLEARED FROM:	15. TYPE CLEARANCE	16. AIRSPEED
				17. A/C WEIGHT

18. BRIEF DESCRIPTION OF MISNAP

19. ELEVATION AT TIME OF MISNAP
S.L. TERRAIN

20. LIST MODEL BONO, REPORTING CUSTODIAN AND DAMAGE CLASSIFICATION OF ANY OTHER A/C INVOLVED (Complete OPNAV Form 3750-3 for each A/C)

* SECTION B CONTRIBUTING FACTORS	FACTOR	FACTOR	FACTOR
1. PILOT ERROR IN TECHNIQUE/JUDGEMENT	9. SERVICING PERSONNEL	17. WEATHER	
2. PILOT DEVIATION FROM STANDARDS PROCEDURES	10. LANDING SIGNAL OFFICER	18. DESIGN AIRCRAFT	
3. PILOT INCORRECT OPERATION OF A/C SYSTEM	11. OTHER PERSONNEL (Specify)	19. DESIGN CREW EQUIPMENT	
4. PILOT OTHER (Specify)	12. ADMINISTRATIVE	20. DESIGN OTHER (Specify)	
5. CREW	13. FACILITIES-BURNTWAY, OVERRUN TAXIWAY FLIGHT DECK	21. ROLLING/PITCHING DECK BOOM BEAM	
6. MAINTENANCE PERSONNEL	14. FACILITIES-NAV AIDS, LANDING AIDS (OCA; CCA; ILS; MIRRO)	22. MATERIAL FAILURE/MALFUNCTION	
7. MAINTENANCE SUPERVISORY PERSONNEL	15. FACILITIES-CATAPULT, ARRESTING GEAR (Ship or field)	23. UNDETERMINED	
8. SUPERVISORY OTHER (Specify)	16. FACILITIES OTHER (Specify)	24. OTHER (Specify)	

1. NAME (Last, First, & middle initial)	2. RANK/DATE	3. FILE SERVICE NO.	4. STATUS	5. GRADE	6. EXP. PERIOD	7. EXP. PERIOD	8. BILLET	9. POSITION	10. PLACE
PILOT (at controls at time of mishap)									
CO-PILOT (Identify & submit separate page)	LOVELL, John R.	LTJG	712581	1315	USNR	25	2	Co-pilot	Cock-pit G

SECTION C PERSONNEL DATA PILOT EXPERIENCE IN HOURS	ITEM		ITEM	ITEM
	11. ALL MODELS	457		
12. ALL MODELS IN LAST 12 MONTHS	194	18. FCPL LANDINGS LAST 6 MONTHS DAY/NIGHT	IN MODEL 42 / 2	
13. ALL MODELS IN LAST 3 MONTHS	67	19. INSTRUMENT HOURS LAST 3 MONTHS ACTUAL/SIMULATED	ALL NA	
14. ALL SERIES THIS MODEL	A/C 188 OFT/CPT NA	20. NIGHT HOURS LAST 3 MONTHS	IN MODEL 8 / 11	
15. ALL SERIES THIS MODEL LAST 12 MONTHS	A/C 188 OFT/CPT NA	21. TOTAL HOURS IN SELECTED AIRCRAFT H-LOC (if applicable)	IN MODEL 8 / 11	
16. ALL SERIES THIS MODEL LAST 3 MONTHS	A/C 67 OFT/CPT NA	22. LAST PRIOR FLIGHT ALL SERIES THIS MODEL	DATE 9 August 1969 DURATION 0.9	
23. DATE/GRADE LAST RATOPS STANDARDIZATION CHECK	14 MARCH 1969	24. TYPE INSTRUMENT CARD	STAN	

OTHER PERS. #	25. NAME (Last, first, & middle initial)	26. RANK/DATE	27. GRADE	28. FILE SERVICE NO.	29. STATUS	30. EXP. PERIOD	31. EXP. PERIOD	32. BILLET	33. POSITION

AIRCRAFT ACCIDENT REPORT
OPNAV FORM 5750-1A (Rev. 3-63, page 2)

SPECIAL HANDLING REQUIRED in accordance with
Para. 65, OPNAV INSTRUCTION 5750.6, effective edition

OPNAV REPORT 5750-1A

PART II MAINTENANCE, MATERIAL, AND FACILITIES DATA

A. A/C HISTORY		PART II MAINTENANCE, MATERIAL, AND FACILITIES DATA								
		1. DATE OF MANUFACTURE	2. FLIGHT HRS. SINCE ACCEPTANCE	3. NO. OF PAR/OVERHAULS	4. MONTHS SINCE LAST PAR/OVERHAUL	5. FLT. HRS. SINCE LAST PAR/OVERHAUL	6. LAST/MOST RECENT ACTIVITY	7. TYPE OF LAST CHECK PERFORMED	8. FLIGHT HRS. SINCE LAST CHECK	9. DAYS SINCE LAST CHECK
		MAY 1964	1275.1	2	15	417.2	REBUILT Corp.	Calendar	59.3	58
B. ENGINE HISTORY	1. ENGINE MODEL	2. ENGINE SERIAL NUMBER	3. FLIGHT HRS. SINCE ACCEPTANCE	4. NUMBER OF OVERHAULS	5. WAS DIR. REQUESTED?	6. FLT. HRS. SINCE LAST OVERHAUL	7. LAST OVERHAUL ACTIVITY	8. TYPE OF LAST CHECK PERFORMED	9. FLIGHT HRS. SINCE LAST CHECK	10. DAYS SINCE LAST CHECK
	(1)									
	(2)									
	(3)									
C. COMPONENT HISTORY	1. COMPONENT INVOLVED Nomenclature	2. MANUFACTURER'S PART NUMBER	3. TOTAL HRS. ON PART	4. NO. OF ON-HAULES	5. HOURS SINCE LAST OVERHAUL	6. OVERHAUL ACTIVITY	7. WAS DIR. REQUESTED?	8. DIR. NO. FOR/AMPS		
	Main Blade Al-1680	K611008-309	389.0	0	NA					
	Main Blade Al-180 ^a	K611008-309	58.8	0	NA					
	Main Blade Al-3153	K611008-309	90.8	0	NA					
	Main Blade Al-191 ^b	K611008-309	378.0	0	NA					
	Servo Flap 6-1683 ^c	K615002-1010	887.4	0	NA					
	Servo Flap 6-1181 ^c	K615002-1010	678.0	0	NA					
	Servo Flap 6-1758 ^c	D615002-1010	784.3	0	NA					
	Servo Flap 6-2173 ^c	K615002-1010	468.0	0	NA					
D. INCIDENTS & GROUND ACCIDENTS*	1. PARTS REPAIRED			2. PARTS REPLACED						
	PART NUMBER	NOMENCLATURE		3. DIRECT MANNIOURS INVOLVED	PART NUMBER	NOMENCLATURE				
E. ENGINE FAILURES	JET ENGINE FLAMEOUT (Include intentional securing to prevent engine damage)									
	AT TIME OF FLAMEOUT	1. ALTITUDE	2. IAS	3. RPM	4. EST	5. MANEUVER AT TIME OF FLAMEOUT	6. FUEL FLOW			
	9. G FORCES	9. RELIGHT	10. ALTITUDE	11. IAS	12. MAX EST	13. FUEL CONTROL	14. NO. RELIGHT ATTEMPTS			
	INTENTIONAL SECURE	15. ENGINE SYMPTOMS			16. CAUSE OF SYMPTOMS					
	RECIPROCATING ENGINE FAILURE									
	17. ALTITUDE	18. IAS	19. ATTITUDE	20. RPM	21. MAP	22. TORQUE/DMEP	23. FUEL FLOW PRESSURE			
	INTENTIONAL SECURE	25. ENGINE SYMPTOMS			26. CAUSE OF SYMPTOMS					
	IDENTIFY OTHER REPORTS CONCERNING THIS MISNAP									
	F. OTHER REPORT	1. AMFPAR SERIAL NUMBER 2. DIR MESSAGE REQUEST DATE-TIME-GROUP _____ Info NASC on DIR request. See para. 55 OPNAVINST 5750.6 3. OTHER Preliminary Report BON HOMME RICHARD Mag 101531 AUG 69 4. Supplementary Report BON HOMME RICHARD Mag 141159 AUG 69								

AIRCRAFT ACCIDENT REPORT
OPNAV FORM 3750-1A (Rev. 3-6, Page 3)

SPECIAL HANDLING REQUIRED in accordance with
Form 65, OPNAV INSTRUCTION 3750.05, effective edition

1. EQUIPMENT INVOLVED <input type="checkbox"/> CATAPOULT	2. FREQUENCY SETTING <input type="checkbox"/> ARRESTING GEAR	3. WIND OVER DECK	4. RELATIVE WIND	5. APPROXIMATE SPEED
6. NAME NUMBER	7. MODEL NUMBER	8. LOCATION OF SHIP	9. EQUIPMENT DAMAGE AND DOWNGEAR ANALYSIS	

10. DATA FOR DOWNGEARING GEAR BARRIER OR BARRICADE USED

G. SHIPS DATA	12. ENGAGED	13. DECK RUNOUT (FEET)	15. RAM TRAVEL (INCHES)	14. CONTROL VALVE SETTINGS		16. ACCUMULATOR PRESSURE (PSI)	17. COMMENTS (For cable failures specify the damage and results to aircraft)
				CONSTANT PRESSURE DOME (P.S.I.) RATIO			
	DECK PENDANT						
	DECK PENDANT						
	BARRIER / BARRICADE						

FOR ACCIDENTS ABOARD CARRIERS (complete on pilot)

1. DATE DEPLOYED COMUS	3. DAY HOURS/LANDINGS SINCE DEPLOYMENT	4. DAY HOURS/LANDINGS LAST 30 DAYS
2. NO. DAYS OPERATING PERIOD		
5. NIGHT HOURS LOGGED SINCE DEPLOYMENT ACTUAL/SIMULATED	6. NIGHT HOURS/LANDINGS SINCE DEPLOYMENT	7. NIGHT HOURS/LANDINGS LAST 30 DAYS

WEATHER AT SCENE OF MISHAP							
1. CEILING	2. VISIBILITY	3. RELATIVE WIND DIRECTION AND VELOCITY	4. TEMPERATURE RUNWAY OUTSIDE AIR	5. DEW POINT	6. ALTIMETER SETTING		
7. OTHER WEATHER CONDITIONS (wind shear, icing level, sea state, density altitude, as appropriate)							

PART III ADDITIONAL INFORMATION

PART	SECTION	ITEM	1.	REMARKS	2. COPY DISTRIBUTION
					200 NAVINVESTIGATION DIRECT MAIL
					1cc NAVFAC WEST COAST
					1cc NAVAIRSYSCOM AIR 09E
					1cc NAVPLANT RIO GRANDE
					1cc HC-1
					1cc COMSEVENTHFLT
					1cc COMFAIRSDIEGO
					1cc CTF 77

COST DAMAGE TO:	3. GOVERNMENT PROPERTY	4. PRIVATE PROPERTY	5. DATE SUBMITTED TO CO
-----------------	------------------------	---------------------	-------------------------

(b) (6)	PART IV SIGNATURES OF THE BOARD		
LCDR, USN VA-94 Aviation Safety Officer	(b) (6)	HC-1 DET 31 Maintenance Officer	UNIT BILLET
(b) (6)	(b) (6)	MS-1 DET 31 Material Officer	UNIT BILLET
COMATKOM AIRWING FIVE Flight Surgeon			

* When property or other items are lost, damaged, or destroyed, indicated by an asterisk in the upper right hand corner must be filled in.
5. Member LTJC, USNR HC-1 DET 31 Admin Officer

ORIGINAL

FF12/CVN-5/NET/oy
3750
Ser 240

20 SEP 1969

SECOND ENDORSEMENT on HC-1 DET 31 AAR 1-70A concerning UH-2C BuNo 149767
occurring 10 August 1969, pilot (b) (6)

From: Commander Attack Carrier Air Wing FIVE
To: Commander Naval Safety Center
Via: (1) Commanding Officer, USS BON HOMME RICHARD (CVA-31)
(2) Commander Carrier Division ONE
(3) Commanding Officer, Helicopter Combat Support Squadron ONE
(4) Commander Naval Air Force, U. S. Pacific Fleet

Subj: HC-1 DET-31 AAR Serial 1-70A; forwarding of

Ref: (a) COMNAVAIRPAC Instruction 3750.16

1. Forwarded, concurring with the conclusions and recommendations of the accident board as modified by the first endorser.
2. The completion date of the latest NAVAIRPAC Accident Prevention Survey by HC-1 DET-31 is not contained in the first endorsement. If the survey has not been conducted since deployment, the O-in-C HC-1 is directed by this endorsement to conduct the accident prevention survey in accordance with reference (a).

(b) (6)

(b) (6)

Copy to:
NAVSAFGEN (2)
NAVAIRSYSCOMHQ (AIR-09E)
COMNAVAIRPAC
COMCARL IV ONE
COMSEVENTHFLT
COMFAIRSDIEGO
CTF SEVEN SEVEN ✓
NAVPLANTREPO KAMAN
CO, USS BON HOMME RICHARD (CVA-31)
CO, HC-1
CINC, HC-1 DET-31

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

ORIGINAL

ORIGINAL

CVA31:04A
3750
Ser 3185
28 SEP 1969

THIRD ENDORSEMENT on HC-1 DET-31 AAR Serial 1-70A concerning UH-2C BU NO 149767 occurring on 10 August 1969, pilot (b) (6)

From: Commanding Officer, USS BON HOMME RICHARD (CVA-31)
To: Commander Naval Safety Center
Via: (1) Commander Carrier Division ONE
 (2) Commanding Officer, Helicopter Combat Support Squadron ONE
 (3) Commander Naval Air Force, U. S. Pacific Fleet

Subj: HC-1 DET-31 AAR Serial 1-70A; forwarding of

1. Forwarded concurring with the conclusions and recommendations of the accident board as modified by subsequent endorsers.

(b) (6)



Copy to:
NAVSAFCEN (2)
NAVAIRSYSCOMHQ (AIR-09E)
COMNAVAIRPAC
COMCARDIV ONE
COMSEVENTHFLT
COMFAIRSDIEGO
CTF SEVEN SEVEN
NAVPLANTREPO KAMAN
COMCVW FIVE
CO, HC-1
OINC, HC-1 DET-31

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

ORIGINAL

FIL/CVA/361 Job
3750
Ser: HH7
9 October 1969

FOURTH ENDORSEMENT on HC-1 DET-31 AAR Serial 1-70A concerning UH-2C
BUNO 149767 occurring on 10 August 1969, pilot (b) (6)

From: Commander Carrier Division ONE
To: Commander Naval Safety Center
Via: (1) Commanding Officer, Helicopter Combat Support Squadron
ONE
(2) Commander Naval Air Force, U. S. Pacific Fleet

Subj: HC-1 DET-31 AAR Serial 1-70A; forwarding of

1. Forwarded concurring with the conclusions and recommendations of
the accident board as modified by subsequent endorsers.

(b) (6)


Copy to:
NAVSAFCEN (2)
NAVAIRSYSCOMHQ (AIR-09E)
COMNAVAIRPAC
COMSEVENTHFLT
COMFAIRSDIEGO
COMATKCARSTRIKEFORSEVENTHFLT
NAVPLANTREPO KAMAN
COMGIVW FIVE
CO, HC-1
OINC, HC-1 DET-31
CO, USS BON HOMME RICHARD (CVA-31)

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

ORIGINAL

•ORIGINAL•

HHS/ULTRON 1
10/gps
13100
Sor: 1062
20 OCT 69

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

c. It should be noted that although x-ray is a good means of detecting structural cracks in rotor blades, it does not provide an adequate means of detecting sub surface corrosion.

d. Another feasible explanation for this mishap is failure of the lateral control system. A failure of this type would not only make the aircraft uncontrollable in the lateral mode, but would also magnify any pilot induced input into the cyclic control and possibly cause the aircraft to react in a manner similar to that described by the pilots.

(b) (6)

(b) (6)

Copy to:
NAVSFCEN (2)
NAVAIRSYSCOM HDQ (AIR-09E)
COMNAVAIRPAC
COMSEVENTHFLT
CTF SEVEN SEVEN ✓
COMPAIRSDIEGO
COMCARDIV ONE
NAVFLANTREPO KAMAN
CO USS DON HUMPHREY RICHARD (CVA-31)
COMCVW FIVE
CinC HC-1 DET 31

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

ORIGINAL

16

•ORIGINAL•

HILSUFTRON 1
10/gps
13100
Ser: 1062
20 OCT 69

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

FIFTH ENDORSEMENT on HC-1 DET 31 AAR serial 1-70A concerning UH-2C BUNO 149767 occurring 10 AUG 69, Pilot LT (b) (6)

From: Commanding Officer, Helicopter Combat Support Squadron ONE
To: Commander Naval Safety Center
Via: Commander Naval Air Force, U. S. Pacific Fleet
Subj: HC-1 DET 31 AAR serial 1-70A; forwarding of

1. Forwarded concurring with the conclusions and recommendations of the accident board and subsequent endorsers as modified by the following comments.
2. Paragraph two (2) of the first endorsement states that the most probable theory as to the cause of this accident is failure of the collective control system. Although possible, this theory is not concurred with for the following reasons:
 - a. Failure of the collective control system will impose excessive forces on the main rotor blades as stated in part VII of the AAR. However, it is highly improbable that these forces would be of such intensity as to result in blade failure. Additionally, if this system failed, the centrifugal force acting on the rotary blades would extend the blade control rod assembly, located inside the blades, toward the blade tip and act on the servo flap to cause the blades to pitch up. Had this occurred, it is unlikely that the aircraft would have reacted in the manner described by the pilots (Enclosures 2 and 3), but instead would have gone into uncontrollable full up collective, causing the aircraft to climb.
 - b. A more probable cause of this accident is sudden failure of a blade in the area of the servo flap bracket. A failure of this type would result in severe, instantaneous forces acting on the rotor system, making the aircraft extremely difficult to control and more closely resembling the events described by the pilots. This theory is further substantiated by a recent incident (HC-1 DET 7 AIR 1-7C1) in which a main rotor blade began separating in flight and subsequently cracked in the area around the servo flap bracket. Investigation revealed that the cause of the crack was corrosion in the area beneath the skin near the inboard servo flap bracket. As a result of this incident, all main rotor blades of aircraft assigned to this command have been x-rayed as recommended by the first endorsement and inspected as required by interim airframe bulletin 172.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

ORIGINAL

3750
Ser 80/

8945

7 - NOV 1969

SPECIAL HANDLING REQUIRED IN ACCORDANCE
WITH OPNAVINST 3750.6 SERIES

SIXTH ENDORSEMENT on HC-1 DET 31 AAR ser 1-70A concerning UH-2C
BuNo 149767 accident occurring 10 Aug 69, pilot (b) (6)

From: Commander, Naval Air Force, U. S. Pacific Fleet
To: Commander, Naval Safety Center

Subj: HC-1 DET 31 AAR ser 1-70A

1. Forwarded, concurring with the conclusions and recommendations
of the Aircraft Accident Board, as modified by the remarks contained
in the fifth endorsement.

2. Although the cause of the accident remains undetermined, the
history of failures in the servo flap area of the main rotor blades
tends to substantiate the theory that the flap or its point of
attachment failed.

(b) (6)

Force Safety Officer

Copy to:
NAVAIRSYSCOMHQ
CONSEVENTHFLT
CONCARDIV ONE
COMATCRAIRWING FIVE
COMFAIRSDIEGO
CO USS BON HOMME RICHARD (CVA-31)
NAVPLANTREPO KAMAN
CO HELSUPPRON ONE
CinC HELSUPPRON ONE DET THREE ONE

UNIT HC-1 Det. 31
 MODEL AN-3C
 BUNO 149767

AAR REVIEW ROUTING SHEETADVANCE ROUTING

PRI	DEPT	DATE IN	DATE OUT	INIT	INTER-DEPT ROUTING:
	M&M		12-23-69	O	
	LSD				

DEPARTMENT REPRESENTATIVES INITIALS FOR RECEIPT OF REPORTS:

YES

REMARKS:

ORIGINAL ROUTING

DEADLINE DATE OUT OF NAVSAFECEN 17 JAN 1970
 EXTENSIONS _____

DEPT	DATE IN	DEPT DEADLINE	DATE OUT	INIT	INTER-DEPT ROUTING
AAD	29 Dec		31 Dec	LSS	

NAVSAFECEN ENDORSEMENT ROUTING

PRI	DEPT	DATE IN	DATE OUT	INIT	ROUTING
1	R&DP				<u>See 1-16-70</u>
2	M&M				
3	ADMIN				

ROUTING AFTER CLOSE-OUT

DEPT	DATE IN	DATE OUT	INIT	INTER-DEPT ROUTING
LSD				

NOTES: 1. No person other than those assigned to the Records Control Branch will remove any part of this document from the folder.

2. Departments will be fully responsible and accountable for documents in their custody until checked back into Records Control Branch.

3. Any department desiring to retain this report longer than five (5) working days must notify Records Control Branch of their need for extension.

NAVSAFECEN 3750-9(11/67)

COMPLETION SHEET

Action to: Correction to:	Action Required	Completed Code/Date
3750-1		/
DIR		/
Misc Items for Action or Correction		
To Code	From Code/Date	
	/	advance coded - 10-20-69 Dg
511	511 11/19/69	ORIGINAL REC'D 10
	512D 17-7-70	Final review completed and document ready for the closed file
	/	
	/	
	/	
	/	
	/	
	/	
	08 JUL 1970	08 JUL 1970
	/	CLOSED
	/	
	/	
	/	
	/	

R&DP-8 (11-67)

DEPARTMENTAL COMMENTS FOR "CLOSE-OUT" LETTER
ON ORIGINAL REVIEW

- NOTE:
1. Negative report is required.
 2. Positive comments will be in a format suitable for inclusion in the "close out" letter.
 3. Attach additional sheets if more space is required.

M&M DEPARTMENT:

No comment HIC 1026

INITIAL/CODE

AERO-MED DEPARTMENT:

83 - None ✓
82 No specific aeroned comment Ø

INITIAL/CODE

NAVAL SAFETY CENTER
NAVAL AIR STATION
NORFOLK, VIRGINIA 23811

113B/kg
3750/lb
Rev. 1
2 Jan 1970

SPECIAL HANDLING REQUIRED IAW OPNAVINST 3750, G-SERIES
FOR OFFICIAL USE ONLY

From: Commander, Naval Safety Center
To: Officer in Charge, Helicopter Combat Support Squadron ONE,
Detachment THIRTY-ONE

Subj: HC-1 DET 31 AAR set 1-70A concerning UH-2C BuNo 149767 accident
on 11 Aug 1969. (b) (6)

1. The subject report and all media segments have been reviewed. Consistent with the conclusions and recommendations of the Aircraft Accident Board as modified by subsequent endorsements.
2. The cause of this accident has been recorded indicating MATERIAL FAILURE (undetermined component of the control system) as the single cause factor.

(b) (6)


Copy to:
NAVAIRSCOMINQ (AIR USE) (2)
COMSEVENTHFLT
COMNAVAIRPAC
CTF-77
COMCARDIV-1
COMFAIRSDIEGO
CO USS BON HOMME RICHARD (CVA-31)
COMCVW-5
CO HC-1
DASCO BLOOMFIELD

FOR OFFICIAL USE ONLY

Part II. Recommendations.

1. X-ray main rotor blades of HO-1 DTF 31 UH2C aircraft. Length of area to be X-rayed should extend 12 inches past either end of flap. Width should be across the width of the rotor blade.
2. Thoroughly inspect collective control system from Automatic Stabilization Equipment package to and including azimuth assembly. Inspection should check for integrity of system as well as proper installation of prescribed components. Not to be excluded are items such as nuts, bolts, cotter keys, and safety wire.

SPECIAL HANDLING REQUIRED
IN ACCORDANCE WITH
OPNAVINST 3750.6 SERIES

Part V. The Accident.

The aircraft took off at 1620 from the flight deck of the USS BON HOMME RICHARD (CVA-31) for a routine plane guard mission. On board were the pilot, co-pilot and two crew members. Several orbits around the plane guard pattern had been completed. At 1635, the pilot commenced entry into a practice hover. He began the maneuver just after the helicopter was turned to the upwind leg of the pattern. The helicopter's position was about 800 yards ahead of the plane guard destroyer's starboard bow. The descent was commenced from 150 feet, 70 knots. Rate of descent was 500 feet per minute to an altitude of about 30-40 feet and airspeed of 30 knots. As the pilot was breaking his rate of descent, the aircraft pitched up and rolled to the right. The pilot added left cyclic. The aircraft rolled to the left violently. The co-pilot felt two jerks to the left. The aircraft was uncontrollable and the movement so violent that the pilot initiated an immediate "MAYDAY" as the co-pilot simultaneously reached for the T-handle to inflate the flotation bags. The aircraft continued to the left and entered the water about 80-90 degrees left wing down.

One crew member, ADJ2 [REDACTED] (b) (6) received a broken right arm during the impact. The pilot initiated a day smoke flare to guide the plane guard destroyer to the scene for the rescue pickup. The rescue was completed approximately 16 minutes after the crash occurred by the USS JOHN W. THOMAS (DD-760).

SPECIAL HANDLING REQUIRED
IN ACCORDANCE WITH
OPNAVINST 3750.6 SERIES

Part VI. Damage to the Aircraft.

ALFA. The aircraft was lost at sea.

SPECIAL HANDLING REQUIRED
IN ACCORDANCE WITH
OPNAVINST 3750.6 SERIES

Part VII - The Investigation and Analysis

The helicopter was entering a normal hover. As descent was broken, the aircraft pitched up, rolled violently to the right, then to the left and entered the water in uncontrollable flight, 80 to 90 degrees left wing down. The pilot attempted to apply corrections but was unsuccessful. At the time the helicopter became uncontrollable, LTJG (b) (6) of the plane guard destroyer, enclosure (7), was looking directly at the aircraft. He observed debris, apparently main rotor blade material, emanating from above the helicopter's passenger compartment. He called the attention of the OOD, LTJG (b) (6) enclosure (6), to the scene who observed an extreme bending of the main rotor blades of 60-70 degrees, the bond occurring at the approximate position of the flaps. Both witnesses were questioned thoroughly by the board members as to exactly what they observed. They were given a demonstration by HC-1 of a UH2C in flight at the approximate distance the crash occurred from their ship. Next, they inspected a parked UH2C so that they could be more descriptive in their identification of exactly what they observed. They were both very emphatic and certain of what they reported.

Of importance concerning LTJG (b) (6) and LTJG (b) (6) statements is the order in which the observations were made. LTJG (b) (6) was the first to notice the irregularities of the helicopter. He observed debris, apparently, from his description, either main rotor blade or flap material. He did not observe the bending of the rotor blades as described by LTJG (b) (6). Next, LTJG (b) (6) observed the debris as described by LTJG (b) (6) and also observed the bending of the main rotor blades.

The witnesses both observed pieces of material which were apparently from the main rotor blades. Therefore, it is submitted that there was a failure of one or more main rotor blades or one or more main rotor blade flaps. One theory is that a section of a blade or a flap separated from the blade itself. This would result in an unbalanced condition creating forces which could cause other sections of blade material to separate. The blade area immediately surrounding the flap receives the greatest stress under normal flight conditions and is considered the most probable area of initial failure. The uncontrollable and violent nature of the helicopter — just prior to collision with the water discounts the possibility that a flap alone separated from a blade. It is believed that a flap separation with no other failure (such as a section of blade material tearing away with the flap) would not have caused the helicopter to become uncontrollable so rapidly if at all. Also discounted is the possibility of failure of a main rotor blade at the rotor hub since the witnesses observed several pieces of debris, none the length of a full blade. Log book information concerning the main rotor blades and flaps is given on page 2 of the 3750-1 form.

A second theory is that a component in the collective control system failed which in turn caused extreme forces on the main rotor blades subsequently resulting in blade failure. The question of the bending of the main rotor blades to a 60-70 degree angle as reported by LTJG (b) (6) is difficult to explain. It is believed that instantaneous full up pitch of the main rotor blades could cause such an unusual result. Aerodynamic action of the blade flap controls rotor blade angle of attack. When the pilot pulls up on the collective control stick, the movement is transmitted up through the azimuth assembly through push-pull rods and control

SPECIAL HANDLING REQUIRED
IN ACCORDANCE WITH
OPNAVINST 3750.6 SERIES

cranks, then through each main rotor blade to each servo flap by a rotor control rod. A 385-405 pound force spring loaded bungee balances the up-loads imposed on the collective stick by the centrifugal force of the rotor blade control rods. A failure of any component between the collective thrust rod and the upper connection of the collective bungee could conceivably cause instantaneous full up pitch of all rotor blades. This action could possibly result in the observed bending which probably would overstress all blades and servo flaps, thus resulting in flaps or pieces of the blades being torn away. The aircraft could then become uncontrollable. If a failure occurred above the azimuth assembly, such a failure would most probably affect a single blade, not all blades as reported by the witness.

The pilot was questioned about movement of the collective control stick during the accident. He did not attempt to move the collective, nor does he remember any movement of the collective. He stated that the rapid right and left movements of the aircraft were so violent that the collective could have been jerked from his hand, but can not remember.

Since the aircraft was not recovered, the board has not been able to determine the sequence of component failure which caused the accident.

SPECIAL HANDLING REQUIRED
IN ACCORDANCE WITH
OPNAVINST 3750.6 SERIES

Part VIII. Conclusions.

The cause of the accident was material failure originating either from a failure of a component of the collective control system or a failure of a section of main rotor blade or blades.

SPECIAL HANDLING REQUIRED
IN ACCORDANCE WITH
OPNAVINST 3750.6 SERIES

HO-1 DFT 31 APR Serial 1-70A concerning UR20 149767, pilot
occurring 10 August 1969

(b) (6)

Enclosures

1. MEDICAL OFFICER'S REPORT (MOR)
2. STATEMENT OF PILOT, LT (b) (6) USNR, (b) (6)
3. STATEMENT OF COPILOT, LTJG JOHN R. LOVELL, USNR, 712581/1315
4. STATEMENT OF AIRCREWMAN, AN (b) (6) USN, B61 24 53
5. STATEMENT OF AIRCREWMAN, ADJ2 (b) (6) USN, R36 00 46
6. STATEMENT OF WITNESS, LTJG (b) (6) USNR, (b) (6)
USS JOHN W. THOMASON (DD-760)
7. STATEMENT OF WITNESS, LTJG (b) (6) USNR, (b) (6)
USS JOHN W. THOMASON (DD-760)
8. STATEMENT OF SURVIVAL EQUIPMENT OFFICER, LTJG (b) (6) USNR,
(b) (6) (b) (6)
9. STATEMENT OF MAINTENANCE OFFICER, LT (b) (6) USN, (b) (6)
10. RESCUE REPORT, OPMAR FORM 3750-13

ORIGINAL

SPECIAL HANDLING REQUIRED
IN ACCORDANCE WITH
OPMARINST 3750.6 SERIES

MEDICAL OFFICER'S REPORT OF A/C ACCIDENT, INCIDENT OR GROUND ACCIDENT
 MEDICAL INFORMATION
 OPMAY FORM 3780/88 (REV. 4-60) 5/64-0107-731-8201

REPORT SYMBOL 3780-7
 See Section H of OPMAYDIRK 3780-6

1. DEGREE OF INJURY			
<input type="checkbox"/> 1 - NONE	<input type="checkbox"/> 4 - FATAL	<input type="checkbox"/> 7 - MISSING, UNKNOWN	
<input checked="" type="checkbox"/> 2 - MINOR	<input type="checkbox"/> 3 - MISSING, LAND		
<input type="checkbox"/> 5 - MAJOR	<input type="checkbox"/> 6 - MISSING, WATER		

2. DAYS HOSPITALIZED _____
 3. DAYS IN QUARTERS _____
 4. DAYS GROUNDED _____ Note _____
 5. UNCONSCIOUS _____ HOURS _____ SECS _____

6a. DISEASE	6b. EXPOSURE	6c. SHOCK
	<input checked="" type="checkbox"/> 1 - MILD <input type="checkbox"/> 2 - MODERATE <input type="checkbox"/> 3 - SEVERE	<input type="checkbox"/> 1 - MILD <input type="checkbox"/> 2 - MODERATE <input type="checkbox"/> 3 - SEVERE

6. INJURIES INCURRED DURING MISHAP <i>(Use Standard DOD Terminology for Body Part, Diagnosis and Cause of Injury.) (See DDDIC, NAVMED PS082.)</i>			LEAVE THESE COLUMNS BLANK		
A. BODY PART:	DIAGNOSIS:	CAUSE:	P	D	C
B. BODY PART:	DIAGNOSIS:	CAUSE:	P	D	C
C. BODY PART:	DIAGNOSIS:	CAUSE:	P	D	C
D. BODY PART:	DIAGNOSIS:	CAUSE:	P	D	C
E. BODY PART:	DIAGNOSIS:	CAUSE:	P	D	C

7. LABORATORY TESTS	A. TISSUE TESTED	B. METHOD USED	C. LABORATORY DOING TEST	D. RESULT
CARBON MONOXIDE				
ALCOHOL		NO LABORATORY TESTS DONE		
LACTIC ACID				
OTHER (SPECIFY)				

8. X-RAY RESULTS:	<input checked="" type="checkbox"/> CHECK IF PERFORMED. SUBMIT RESULTS ON SEPARATE SHEET.					
9. DISEASES/DEFECTS PRESENT AT TIME OF MISHAP	METHOD OF DISCOVERY				WAIVERS (AS APPLICABLE)	
DIAGNOSIS	ANNUAL PHYSICAL	SICK CALL	AUTOPSY	OTHER	AUTHORITY	DATE
None						

10. AUTOPSY CONDUCTED BY:	11. MATERIAL SUBMITTED TO AFIP:			
<input type="checkbox"/> M - MILITARY PATHOLOGIST	<input type="checkbox"/> F - FLIGHT SURGEON	<input type="checkbox"/> 1 - AUTOPSY REPORT	<input type="checkbox"/> 3 - PICTURES	
<input type="checkbox"/> C - CIVILIAN PATHOLOGIST	<input type="checkbox"/> Y - OTHER	<input type="checkbox"/> 2 - FROZEN TISSUE	<input type="checkbox"/> 4 - FIXED TISSUE	
<input type="checkbox"/> PROTOCOL ATTACHED	<input type="checkbox"/> WILL BE FORWARDED			

12. LIST ADDITIONAL INJURIES RECEIVED AS A RESULT OF THE MISHAP, AND ADD ANY PERTINENT REMARKS:

1. Slight abrasion, lower right chin area, probably due to chin strap.
2. Mild discomfort, mid-back area. Cause unknown. PE and films unremarkable.
3. Mild sprain, left thumb. Cause unknown. Films unremarkable.

NAME	SERIAL NO.	A/C	BUNO
LOVELL, John R., Jr.	712581	UH-2C	149767

APPENDIX TO HC-1 MOR 1-69A

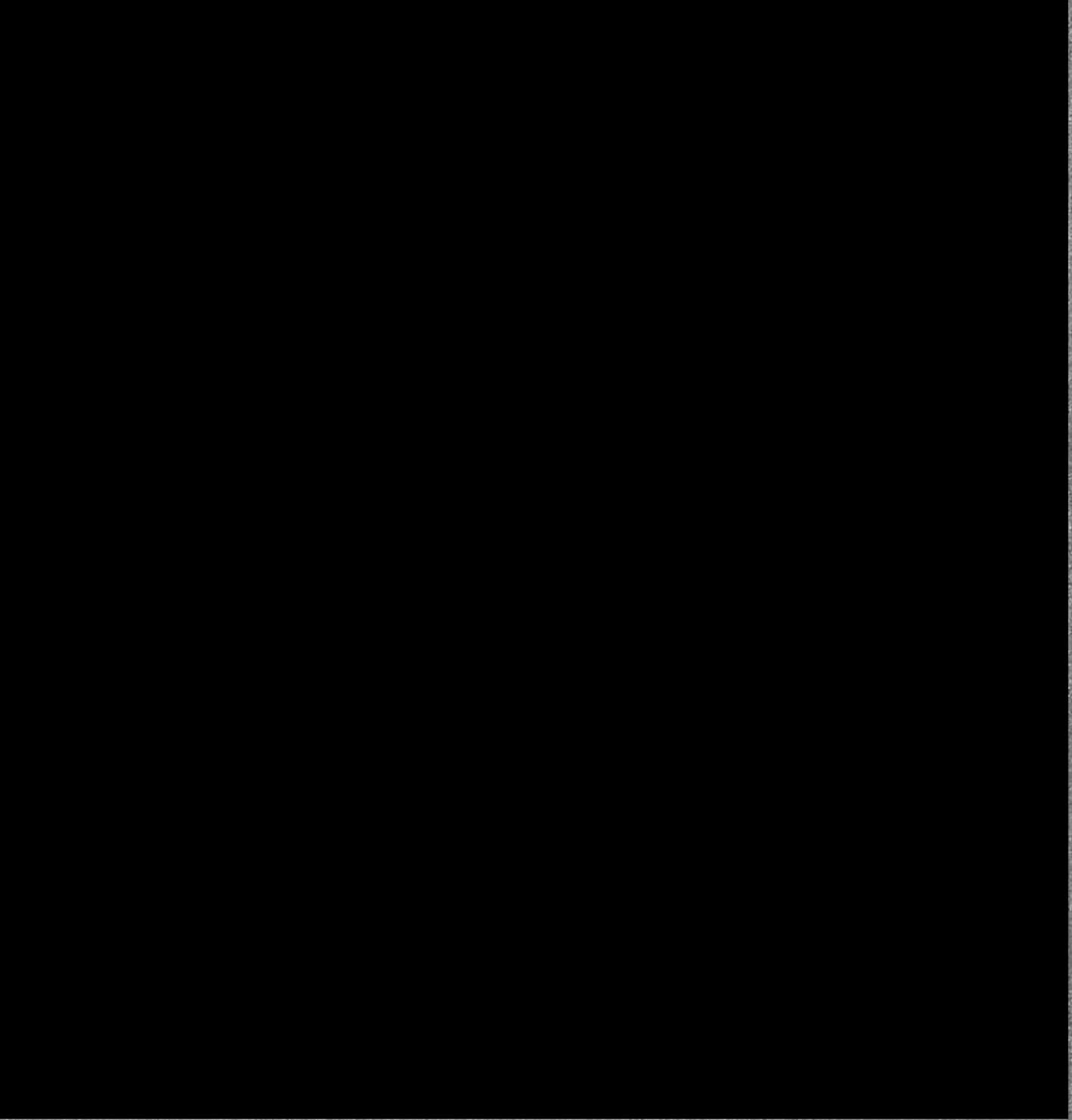
MEDICAL OFFICER'S REPORT OF A/C ACCIDENT
LOVELL, John R. Jr. Lt(jg) 712581/1315 USNR

OPNAV FORM 3750/8B - NUMBER 8 - X-RAY RESULTS

1. PA and lateral, lumbo-sacral and thoracic spine: Negative
2. PA and lateral, left thumb and hand: Negative

(b) (6)

(b) (6)



MEDICAL OFFICER'S REPORT OF A/C ACCIDENT, INCIDENT OR GROUND ACCIDENT
PSYCHOPHYSIOLOGICAL AND ENVIRONMENTAL FACTORS
OPNAV FORM 3730-BC (REV. 4-68) 5/M-0107-731-8201

REPORT STANAG 3730-7
See Section II of OPNAVINST 3730-6
PAGE 1 OF 2

INSTRUCTIONS: Complete on all occupants of aircraft, all injured persons, and all persons possibly contributing to the cause of the mishap. Supervisory factors attributable to persons not in the aircraft and such factors as design or weather cannot be reported only for the person in primary control of the aircraft. Factors contributing to injury during mid-air collisions, crash landing, ditching, etc., are to be considered part of survival phase. Use codes as right to show only those factors present or contributing in each phase.

FACTORS	1	2	3	4	5	6	7	8	9
1. SUPERVISORY FACTORS									
A. INADEQUATE BRIEFING	101								
B. ORDERED/LED FLIGHT BEYOND CAPABILITY	102								
C. POOR CREW COORDINATION	103								
D. OTHER (SPECIFY)	109								
2. PRE-FLIGHT FACTORS									
A. FAULTY FLIGHT PLAN	201								
B. FAULTY PRE-FLIGHT OF AIRCRAFT	202								
C. FAULTY PREPARATION OF PERSONAL EQUIPMENT	203								
D. HURRIED DEPARTURE	204								
E. DELAYED DEPARTURE	205								
F. INADEQUATE WEATHER ANALYSIS	206								
G. OTHER (SPECIFY)	209								
3. EXPERIENCE/TRAINING FACTORS									
A. INADEQUATE TRANSITION	301								
B. LIMITED TOTAL EXPERIENCE	302								
C. LIMITED RECENT EXPERIENCE	303								
D. FAILURE TO USE ACCEPTED PROCEDURES	304								
E. OTHER (SPECIFY)	309								
4. DESIGN FACTORS									
A. DESIGN OF INSTRUMENTS, CONTROLS	401								
B. LOCATION OF INSTRUMENTS, CONTROLS	402								
C. FAILURE OF INSTRUMENTS, CONTROLS	403								
D. COCKPIT LIGHTING	404								
E. RUNWAY LIGHTING	405								
F. LIGHTING OF OTHER AIRCRAFT	406								
G. PERSONAL EQUIPMENT INTERFERENCE	407								
H. WORKSPACE INCOMPATIBLE WITH MAN	408								
I. OTHER (SPECIFY)	409								
5. COMMUNICATION PROBLEMS									
A. MISINTERPRETED COMMUNICATIONS	501								
B. DISRUPTED COMMUNICATIONS	502								
C. LANGUAGE BARRIER	503								
D. NOISE INTERFERENCE	504								
E. OTHER (SPECIFY)	509								
6. PSYCHOPHYSIOLOGICAL FACTORS									
A. FOOD POISONING	601								
B. MOTION SICKNESS	602								
C. OTHER ACUTE ILLNESS	603								
D. OTHER PRE-EXISTING DISEASE/DEFECT	604								
E. GET-HOMEITIS	605								
F. MANGOVER	606								
7. ENVIRONMENTAL FACTORS									
A. ACCELERATION FORCES IN-FLIGHT	701								
B. ACCELERATION FORCES IMPACT	702								
C. DECOMPRESSION	703								
D. VIBRATION	704								
E. GLARE	705								
F. SMOKE, FUMES, ETC.	706								
G. HEAT	707								
H. COLD	708								
I. WINDBLAST	709					</td			

DEFINING HUMAN FACTORS (HFA) (Continued)

PAGE 2 OF

FACTORS	ITEMS	ITEMS	FACTORS
E. OTHER FACTORS TO BE CONSIDERED (Cont.)			K. DELAY IN TAKING NECESSARY ACTION
F. MISLED BY FAULTY INSTRUMENTS	803		L. VIOLATION OF FLIGHT DISCIPLINE
G. VISUAL RESTRICTION BY EQUIPMENT STRUCTURES	804		M. NAVIGATIONAL ERROR
H. TASK OVERSATURATION	807		N. INADVERTENT OPERATION, SELF-INDUCED
I. INADEQUATE COORDINATION OR TIMING	808		O. INADVERTENT OPERATION, MECHANICALLY INDUCED
J. MISJUDGED SPEED OR DISTANCE	809		P. OTHER (SPECIFY)
J. SELECTED WRONG COURSE OF ACTION	810		

REMARKS: (Indicate item and describe circumstances in detail as necessary.)

MEDICAL OFFICER'S REPORT OF A/C ACCIDENT / INCIDENT OR GROUND ACCIDENT
 PERSONAL DATA
 OPMAY FORM 3750/80 (REV. 4-68) S/N 0107-731-8401

REPORT STANAG 2700-7

See Section H of OPMAY FORM 3750.6

I. ROLE OF THIS INDIVIDUAL IN THE CAUSE OF THE MISHAP

I. CONTRIBUTING EFFECT

A. PRIMARY	B. CONTRIBUTING
<input type="checkbox"/> 1. DEFINITE <input type="checkbox"/> 2. PROBABLE <input type="checkbox"/> 3. POSSIBLE	<input type="checkbox"/> 4. DEFINITE <input type="checkbox"/> 5. PROBABLE <input type="checkbox"/> 6. POSSIBLE
<input type="checkbox"/> 7. NONE <input type="checkbox"/> 8. UNKNOWN	

B. BACKGROUND (Complete for all pilots and others who possibly contributed to mishap)

A. DATE LAST LEAVE ENDED	6 Aug 1968	B. DAYS DURATION LAST LEAVE	14 days
C. TYPE OF LEAVE LAST TAKEN			
<input type="checkbox"/> 1. ORDINARY <input type="checkbox"/> 2. EMERGENCY		<input type="checkbox"/> 3. REENLISTMENT	<input type="checkbox"/> 4. GRADUATION
<input type="checkbox"/> 5. SICK OR CONVALESCENT		<input checked="" type="checkbox"/> 6. DELAY ENROUTE	<input type="checkbox"/> 7. UNKNOWN
D. DATE OF LAST PREVIOUS FLIGHT	9 Aug 69		
E. IN LAST 24 HOURS	20 MIN.	F. IN LAST 48 HOURS	4 MIN. 45
G. IN LAST 24 HOURS	1 HOURS	H. IN LAST 48 HOURS	7 HOURS
I. IN LAST 24 HOURS	6 MIN. 0	J. IN LAST 48 HOURS	14 MIN. 0
K. IN LAST 24 HOURS	15 MIN.	L. IN LAST 48 HOURS	19.75 HOURS
M. CONTINUOUS DUTY PRIOR TO MISHAP	1 HOURS	N. HOURS CONTINUOUSLY AWAKE PRIOR TO MISHAP	4.5 HOURS
O. DURATION OF LAST SLEEP PERIOD	10 MIN.	P. TIME IN COCKPIT PRIOR TO FLIGHT	18 MIN.

III. PHYSIOLOGICAL, LOW PRESSURE CHAMBER AND VERTIGO TRAINING (For all personnel)

TYPE TRAINING ACCOMPLISHED	PLACE TRAINING ACCOMPLISHED	COMPLETED		ROLE* IN MISHAP	For role in mishap, use following codes:
		Month	Year		
Night vision Pressure chamber	NAS, Miramar NAME, PNCLA, Fla	Jan	67	0	0 - NO IMPORTANCE 1 - TRAINING DEFINITELY HELPED 2 - TRAINING POSSIBLY HELPED 3 - LACK OF TRAINING DEFINITELY A FACTOR 4 - LACK OF TRAINING POSSIBLY A FACTOR 5 - UNKNOWN
		Jan	67	0	

IV. ANTHROPOMETRIC DATA

a. DATE OF BIRTH	DAY 24 MONTH May YEAR 1941	b. HEIGHT	72 INCHES	c. WEIGHT	184 POUNDS
d. SITTING HEIGHT	37.7 INCHES	e. TRUNK HEIGHT	26.1 INCHES	f. FUNCTIONAL REACH	44.8 INCHES
g. BUTTOCK-KNEE LENGTH	21.8 INCHES	h. LEG LENGTH	15.9 INCHES	i. SHOULDER WIDTH (BIDELOID)	17.2 INCHES

V. GENERAL

1. NUMBER AND TYPE OF PRIOR MISHAPS (Complete for all pilots, co-pilots, and/or other persons in control of aircraft)
 a. No. None b. DESCRIBE TYPE(S):

2. TOTAL YEARS OF FORMAL EDUCATION: 16

3. CHRONOLOGICAL ACCOUNT OF ACTIVITIES OF PREVIOUS 72 HOURS (For all pilots, co-pilots, and/or persons possibly contributing to mishap)

10 August 1969	9 August 1969 (cont)	7 August 1969
1630 Accident	1130 Preflight	2400 Sleep
1620 Launch (approx)	1100 Lunch	2000 Movie
1530 Preflight	1045 Awake	1900 Evening meal
1515 Took over from last crew	0100 Asleep	1830 Flight duty over
1300 Lunch	0030 Chow	1530 Took over from last crew
1200 Awake		
0200 Asleep		
0100 Chow		
9 August 1969	8 August 1969	
2000 Wardroom movie	2400 Secured flight duty	
1700 Dinner	1930 Preflight	
1600 Secured flight duty	1900 Took over from last crew	
1200 Flight duty	1700 Evening meal	
	1300 Collateral work	
	1230 Lunch	
	1130 Awake	

NAME	SERIAL NO.	A/C	BUNO
LOVELL, John R. Jr.	712581	UH-2C	149767

- | | |
|---|---|
| <p>01 - NOT AVAILABLE-SUPPLY PROBLEM
 02 - NOT AVAILABLE-LEFT BEHIND
 03 - DISCARDED
 04 - LOST
 05 - DAMAGED-MINOR
 06 - DAMAGED-MAJOR
 07 - BURNED-MINOR
 08 - BURNED-MAJOR
 09 - DESTROYED BY EXTREME FORCE/FIRE
 10 - FAILED TO OPERATE (RADIO, ACTUATOR, ETC.)
 11 - OPERATED PARTIALLY
 12 - DIFFICULTY LOCATING
 13 - BEYOND REACH
 14 - CONNECTION/CLOSURE DIFFICULTY
 15 - CONNECTION/CLOSURE FAILURE
 16 - RELEASE/DISCONNECT DIFFICULTY
 17 - RELEASE/DISCONNECT FAILURE
 18 - UNINTENTIONAL RELEASE/DISCONNECT
 19 - UNINTENTIONAL ACTUATION
 20 - ACTUATION DIFFICULTY
 21 - ACTUATION FAILURE
 22 - ACTUATED BY OTHER PERSON
 23 - RESTRAINT/ATTACHMENT INADEQUACY
 24 - RESTRAINTS/ATTACHMENTS NOT USED PROPERLY FOR MAXIMUM PROTECTION
 25 - IMPROPER USE (OTHER)
 26 - UNFAMILIAR WITH USE
 27 - COLD HAMPERED USE</p> | <p>28 - BURST/HAMPERED USE
 29 - WATER HAMPERED USE
 30 - OTHER EQUIPMENT INTERFERED
 31 - DOING/REMOVAL PROBLEM
 32 - DISCOMFORT/BULKINESS
 33 - POOR FIT
 34 - LEAKED
 35 - MATERIEL DEFICIENCY
 36 - DESIGN DEFICIENCY
 37 - HANGUP/ENTANGLEMENT (WITH A/C OR OTHER EQUIPMENT)
 38 - ENTANGLEMENT (PARACHUTE SUSPENSION LINES ONLY)-MAJOR
 39 - ENTANGLEMENT (PARACHUTE SUSPENSION LINES ONLY)-MINOR
 40 - DRAGGING (PARACHUTE ONLY)
 41 - NON-STANDARD CONFIGURATION
 42 - AIDED IN LOCATION/RESCUE
 43 - NOT EFFECTIVE IN LOCATION/RESCUE (USED IN AREA OF SAR VEHICLES)
 44 - PREVENTED/MINIMIZED INJURY
 45 - EQUIPMENT PROBLEM (LOSS, FAILURE, ETC.) A FACTOR IN PRODUCING BURST
 46 - EQUIPMENT PRODUCED INJURY (HT BY EJECTION SEAT, ETC.)
 47 - FAILURE/DELAY IN USING COMPROMISED SURVIVAL/RESCUE
 48 - ALL CREW EQUIPMENT (CODE ONLY ONCE)
 49 - MAINTENANCE/INSTALLATION ERROR
 50 - PROBLEM EXPERIENCED BY OTHERS IN ACTUATION/RELEASE OF EQUIPMENT
 51 - EQUIPMENT DAMAGE-SELF INDUCED
 52 - EQUIPMENT FAILURE-SELF INDUCED
 60 - OTHER (SPECIFY)</p> |
|---|---|

MEDICAL OFFICER'S REPORT OF A/C ACCIDENT / INCIDENT OR GROUND ACCIDENT
 PERSONAL, SURVIVAL AND ESCAPE EQUIPMENT
 OPMAY FORM 2790-8E (REV. 4-68) 2/N 0107-731-0001

REPORT SYMBOL: SWB-7

See Section II of OEMAF FORM 2790-8E
 PAGE 1 OF 2

NOMENCLATURE AND MODEL DESIGNATION	REQUIRED	AVAILABLE	USED	NEED	PROBLEMS	
					Indicate by code from list on reverse side.	
1. CLOTHING (HAT, HEADGEAR, SHOES, GLOVES, VEST, UNDERWEAR, ETC.)						
Helmet, APH-6 (with dual visor and sound ear cups)	Y	Y	AER	AER		
Nomex flight suit	Y	Y				
Nomex flight gloves	Y	Y				
2. OXYGEN MASK						
3. OXYGEN REGULATOR						
4. LIFE VEST Mae West (MK-2)	Y	Y	S	S	60	
5. LIFE RAFT LR-1	Y	Y				
6. SURVIVAL RADIOS	N	N				
7. SIGNALLING DEVICES MK-79 Pen flare (in flight suit)	N	Y				
MK-13, MOD 0 flares (in Mae West)	Y	Y				
Night strobe (in Mae West)	Y	Y				
8. SURVIVAL KIT (CONTAINER)						
9. OTHER SURVIVAL GEAR						
Survival knife, 5 inch	Y	Y				
Flight boots, steel toed	Y	Y	AE	AE		
10. RESTRAINTS (LAP BELTS, SHOULDER HARNESS, LEG RESTRAINTS)						
Lap belt and shoulder harness	Y	Y	A	A		
11. PARACHUTE-TYPE						
12. PARACHUTE CANOPY RELEASE						
13. PARACHUTE OPENING/DEPLOYMENT DEVICES						
14. SEAT TYPE						
15. OTHER (SPECIFY)						
16. EXPLAIN PROBLEMS (USE REVERSE SIDE IF NECESSARY)						

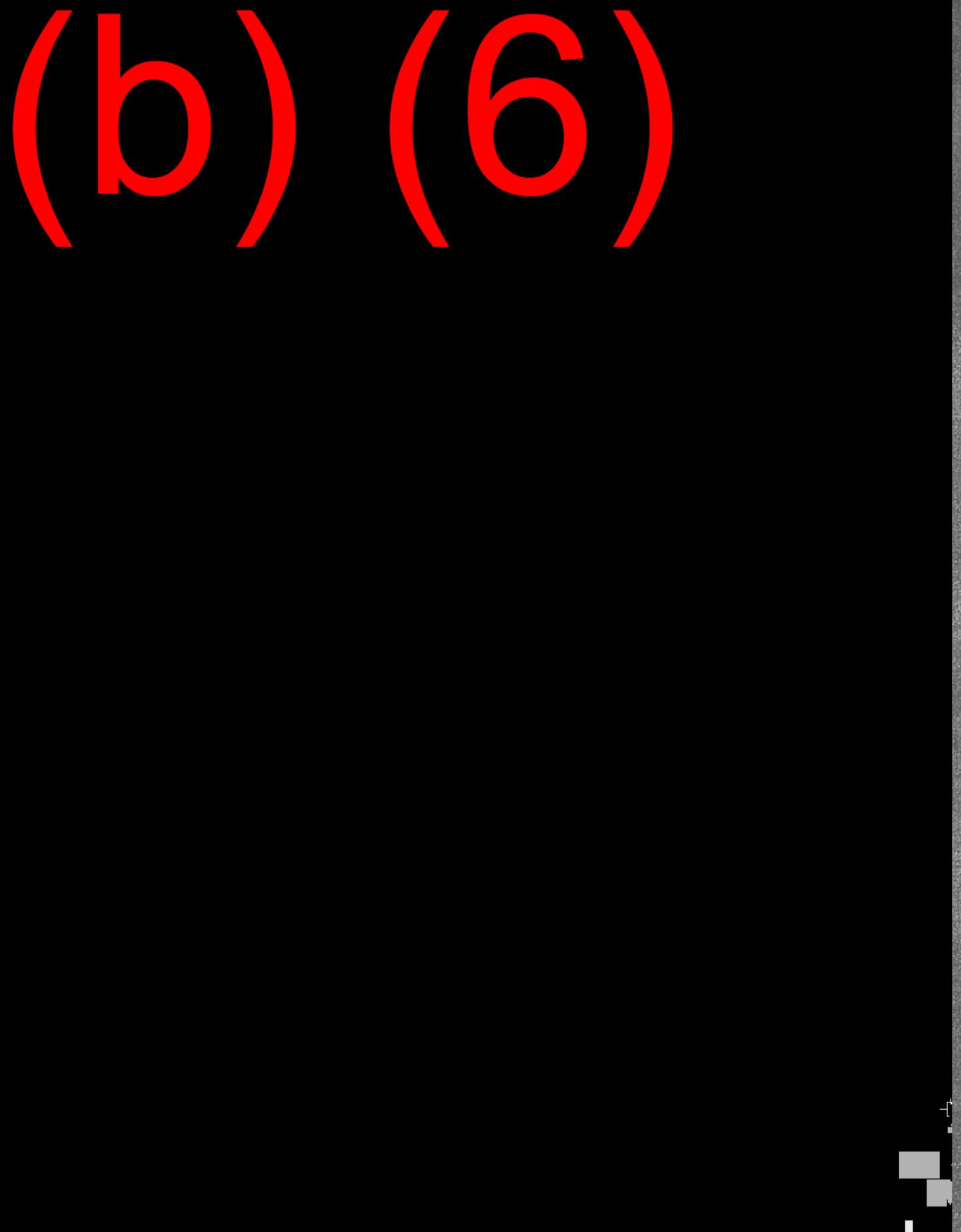
- Item 4. With both CO₂ chambers of the Mae West inflated (but not including the orally inflated chamber), co-pilot states at times swells came over his head. (Total weight of personal/survival gear estimated at fifteen pounds or less.) Vest was checked after rescue and no defect was noted.

- Item 4. A "floatation device" is required, not specifically a Mae West.

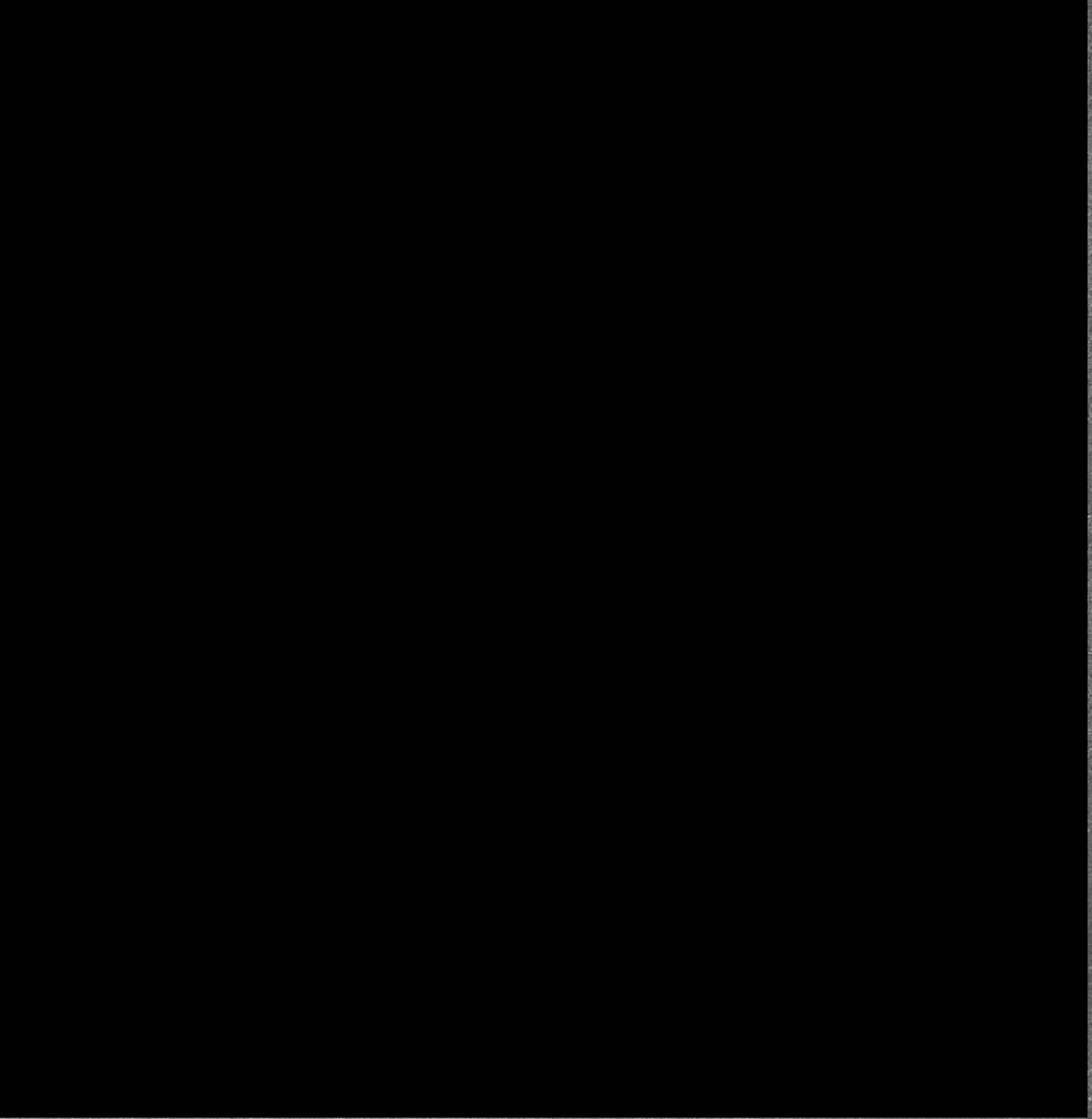
NAME	SERIAL NO.	A/C	CONTINUED ON REVERSE SIDE
LOVELL, John R. Jr.	712581	UH-2C	149767

- | | |
|--|---|
| 81 - NOT AVAILABLE-SUPPLY PROBLEM | 38 - INJURY HAMPERED USE |
| 82 - NOT AVAILABLE-LEFT BEHIND | 39 - WATER HAMPERED USE |
| 83 - DISCARDED | 40 - OTHER EQUIPMENT INTERFERED |
| 84 - LOST | 41 - DOWNING/REMOVAL PROBLEM |
| 85 - DAMAGED-MINOR | 42 - DISCOMFORT/BULKINESS |
| 86 - DAMAGED-MAJOR | 43 - POOR FIT |
| 87 - BURNED-MINOR | 44 - LEAKED |
| 88 - BURNED-MAJOR | 45 - MATERIEL DEFICIENCY |
| 89 - DESTROYED BY EXTREME FORCE/FIRE | 46 - DESIGN DEFICIENCY |
| 10 - FAILED TO OPERATE (RADIO, ACTUATOR, ETC.) | 37 - HANGUP/ENTANGLEMENT (WITH A/C OR OTHER EQUIPMENT) |
| 11 - OPERATED PARTIALLY | 38 - ENTANGLEMENT (PARACHUTE SUSPENSION LINES ONLY, Y1-MAJOR) |
| 12 - DIFFICULTY LOCATING | 39 - ENTANGLEMENT (PARACHUTE SUSPENSION LINES ONLY, Y1-MINOR) |
| 13 - BEYOND REACH | 40 - DRAGGING (PARACHUTE ONLY) |
| 14 - CONNECTION/CLOSURE DIFFICULTY | 41 - NON-STANDARD CONFIGURATION |
| 15 - CONNECTION/CLOSURE FAILURE | 42 - AIDED IN LOCATION/RESCUE |
| 16 - RELEASE/DISCONNECT DIFFICULTY | 43 - NOT EFFECTIVE IN LOCATION/RESCUE (USED IN AREA OF SAR VEHICLE) |
| 17 - RELEASE/DISCONNECT FAILURE | 44 - PREVENTED/MINIMIZED INJURY |
| 18 - INADVERTENT RELEASE/DISCONNECT | 45 - EQUIPMENT PROBLEM (LOSS, FAILURE, ETC.) A FACTOR IN PRODUCING INJURY |
| 19 - INADVERTENT ACTUATION | 46 - EQUIPMENT PRODUCED INJURY (BT BY EJECTION SEAT, ETC.) |
| 20 - ACTUATION DIFFICULTY | 47 - FAILURE/DELAY IN USING COMPROMISED SURVIVAL/RESCUE |
| 21 - ACTUATION FAILURE | 48 - ALL CREW EQUIPMENT (CODE ONLY ONCE) |
| 22 - ACTUATED BY OTHER PERSON | 49 - MAINTENANCE/INSTALLATION ERROR |
| 23 - RESTRAINT/ATTACHMENT INADEQUACY | 50 - PROBLEM EXPERIENCED BY OTHERS IN ACTUATION/RELEASE OF EQUIPMENT |
| 24 - RESTRAINTS/ATTACHMENTS NOT USED PROPERLY FOR MAXIMUM PROTECTION | 51 - EQUIPMENT DAMAGE-SELF INDUCED |
| 25 - IMPROPER USE (OTHER) | 52 - EQUIPMENT FAILURE-SELF INDUCED |
| 26 - UNFAMILIAR WITH USE | 60 - OTHER (SPECIFY) |
| 27 - COLD HAMPERED USE | |

(b) (6)



(b) (6)



MEDICAL OFFICER'S REPORT OF A/C ACCIDENT, INCIDENT OR GROUND ACCIDENT
ESCAPE - EGRESS COMPLETE FOR ALL INDIVIDUALS
OPNAV FORM 3780 SF (Rev. 4-68) 3-N0107-201-8401

REPORT STUDIO 2000
The Standard of Operational Excellence

PAGE 1 OF 2

1. LOCATION IN AIRCRAFT		C. OTHER	
<input type="checkbox"/> 1. COCKPIT OR PILOT'S COMPARTMENT <input type="checkbox"/> 2. NAVIGATOR'S ENGINEER'S COMPARTMENT <input type="checkbox"/> 3. PASSENGERS' COMPARTMENT (SINGLE DECK) <input type="checkbox"/> 4. PASSENGERS' COMPARTMENT (UPPER DECK) <input type="checkbox"/> 5. PASSENGERS' COMPARTMENT (LOWER DECK) <input type="checkbox"/> 6. OTHER COMPARTMENT <input type="checkbox"/> 9. COMPARTMENT UNKNOWN		<input type="checkbox"/> A. STANDARD EMERGENCY GROUND EGRESS <input checked="" type="checkbox"/> B. UNDERWATER EGRESS (NOT EJECTION) <input type="checkbox"/> C. DID NOT ESCAPE <input type="checkbox"/> D. EXIT UNASSISTED (OTHER THAN STANDARD EMERG. GROUND EGGS) <input type="checkbox"/> E. CARRIED/ASSISTED OUT <input type="checkbox"/> F. BLOWN/THROWN OUT <input type="checkbox"/> G. JUMPED FROM A/C (AIRBORNE) <input type="checkbox"/> H. UNKNOWN IF ESCAPE ACCOMPLISHED <input type="checkbox"/> I. ESCAPED, METHOD UNKNOWN	
B. LONGITUDINAL LOCATION	C. LATERAL LOCATION	3. INTENT FOR ESCAPE	
<input checked="" type="checkbox"/> 1. FORWARD SECTION <input type="checkbox"/> 2. CENTER SECTION <input type="checkbox"/> 3. AFT SECTION <input type="checkbox"/> 4. SECTION UNKNOWN	<input type="checkbox"/> 2. CENTER <input checked="" type="checkbox"/> 4. LEFT SIDE <input type="checkbox"/> 5. RIGHT SIDE <input type="checkbox"/> 9. UNKNOWN	<input checked="" type="checkbox"/> 1. INTENTIONAL <input type="checkbox"/> 2. UNINTENTIONAL, SELF INDUCED	<input type="checkbox"/> 3. UNINTENTIONAL, MECHANICAL <input type="checkbox"/> 4. INTENT UNKNOWN
D. DIRECTION FACING	E. USE OF SEAT	4. EXIT USED	
<input checked="" type="checkbox"/> 1. FORWARD <input type="checkbox"/> 2. AFT <input type="checkbox"/> 3. SIDEWARD <input type="checkbox"/> 9. UNKNOWN	<input type="checkbox"/> 8. NOT IN SEAT <input checked="" type="checkbox"/> 1. IN SEAT <input type="checkbox"/> 2. BUNK/LITTER <input type="checkbox"/> 9. UNKNOWN	<input type="checkbox"/> 1. NORMAL EXIT <input type="checkbox"/> 2. EJECTED THROUGH CANOPY <input type="checkbox"/> 3. EMERGENCY EXIT	<input type="checkbox"/> 8. OTHER <input type="checkbox"/> 9. UNKNOWN
2. METHOD OF ESCAPE (More than one may apply)			
<p>A. EJECTION</p> <input type="checkbox"/> 1. ACCOMPLISHED (FREE OF AIRCRAFT) <input type="checkbox"/> 2. ATTEMPTED (NOT ACCOMPLISHED) <input type="checkbox"/> 3. SEAT EJECTED ON IMPACT (TERRAIN) <input type="checkbox"/> 4. INADVERTENT EJECTION <input type="checkbox"/> 7. UNKNOWN IF ATTEMPT WAS MADE <input type="checkbox"/> 6. SUSPECTED EJECTION <input type="checkbox"/> 8. DEFINITELY NOT ATTEMPTED			
<p>B. BAILOUT</p> <input type="checkbox"/> 1. ACCOMPLISHED (FREE OF AIRCRAFT) <input type="checkbox"/> 2. ATTEMPTED (NOT ACCOMPLISHED) <input type="checkbox"/> 3. BAILED OUT AFTER EJECTION ATTEMPT FAILED <input type="checkbox"/> 7. UNKNOWN IF ATTEMPT WAS MADE <input type="checkbox"/> 8. SUSPECTED BAILOUT <input type="checkbox"/> 6. DEFINITELY NOT ATTEMPTED			
5. COCKPIT/CABIN CONDITION AFTER IMPACT			
<input type="checkbox"/> 8. NO DAMAGE (OTHER THAN CANOPY LOSS, ETC.) <input type="checkbox"/> 1. MINOR DAMAGE (DEFINITELY HABITABLE) <input type="checkbox"/> 2. REASONABLY INTACT (PROBABLY HABITABLE) <input type="checkbox"/> 3. MAJOR DAMAGE (PROBABLY NOT HABITABLE) <input type="checkbox"/> 4. DESTROYED (DEFINITELY NOT HABITABLE) <input checked="" type="checkbox"/> 9. UNKNOWN			
6. ORDER OF ESCAPE (1st, 2nd, etc.)			
7. REASON(S) FOR ESCAPE (More than one may apply)			
<input type="checkbox"/> A. FIRE/EXPLOSION/SMOKE <input checked="" type="checkbox"/> B. LOSS OF CONTROL <input type="checkbox"/> C. ENGINE FAILURE <input type="checkbox"/> D. FUEL EXHAUSTION <input type="checkbox"/> E. STRUCTURAL FAILURE <input type="checkbox"/> F. MID-AIR COLLISION <input checked="" type="checkbox"/> G. WATER IMPACT <input type="checkbox"/> H. GROUND/STRUCTURE IMPACT <input type="checkbox"/> J. LAUNCH FAILURE <input type="checkbox"/> K. ARRESTMENT FAILURE <input type="checkbox"/> L. OTHER <input type="checkbox"/> Z. UNKNOWN			

NAME:

LOVELL, John R., Jr.

SERIAL NO.:

712581

A/C:

ME-92

CONTINUED ON REVERSE SIDE

BUNO

149267

8. COMMUNICATIONS PRIOR TO ESCAPE

- 1. DISTRESS SIGNAL TRANSMITTED
 - 2. POSITION FIX TRANSMITTED
 - 3. EMERGENCY IFF (MANUAL)
 - 4. EMERGENCY IFF (AUTOMATIC)
 - 5. UNKNOWN
 - 6. NONE

9. NUMBER OF PREVIOUS

EJECTIONS none EMERGENCY BAILOUTS none
OTHER PARACHUTE JUMPS (TRAINING, SKYDIVING, ETC.) none

10. TERRAIN OF PARACHUTE LANDING OR CRASH SITE

(More than one may be applicable)

- | | |
|--|---|
| <input type="checkbox"/> A - OPEN SEA | <input type="checkbox"/> K - BUILDING |
| <input type="checkbox"/> B - LARGE LAKE | <input type="checkbox"/> L - FLIGHT DECK |
| <input type="checkbox"/> C - RIVER | <input type="checkbox"/> M - DENSE WOODS |
| <input type="checkbox"/> D - DEEP WATER, OTHER | <input type="checkbox"/> N - IN TREES |
| <input type="checkbox"/> E - SHALLOW WATER | <input type="checkbox"/> T - THROUGH TREES |
| <input type="checkbox"/> F - DEEP SNOW | <input type="checkbox"/> P - RAVINE/STEEP SLOPE |
| <input type="checkbox"/> G - THICK ICE | <input type="checkbox"/> Q - ROCKS |
| <input type="checkbox"/> H - MARSH/SWAMP/MUD | <input type="checkbox"/> R - IN/NEAR FIREBALL |
| <input type="checkbox"/> U - HARD GROUND | <input type="checkbox"/> S - DESERT |
| <input type="checkbox"/> J - SOFT GROUND | <input type="checkbox"/> Y - UNKNOWN |
| | <input type="checkbox"/> Z - OTHER |

13.

EGRESS DIFFICULTIES (Place X in appropriate column)

B - Before; D - During; A - After

- 1. BUFFETING
 - 2. G FORCES
 - 3. WINDBLAST
 - 4. SEAT PINS NOT REMOVED
 - 5. DIFFICULTY LOCATING CANOPY JETTISON MECHANISM
 - 6. HAMPERED BY CLOTHING
 - 7. HAMPERED BY EQUIPMENT (INCLUDE BODY ARMOR)
 - 8. HAMPERED BY INJURIES
 - 9. DIFFICULTY RELEASING CANOPY/HATCH
 - 10. FAILURE TO RELEASE CANOPY/HATCH
 - 11. DIFFICULTY LOCATING/REACHING NORMAL EJECTION MECHANISM
 - 12. DIFFICULTY LOCATING/REACHING ALTERNATE EJECTION MECHANISM
 - 13. FACE CURTAIN FAILED TO ACTIVATE SEAT
 - 14. FACE CURTAIN PROBLEM (LOCATING, REACHING, ETC.)
 - 15. SEAT PAN FIRING HANDLE FAILED TO ACTIVATE SEAT
 - 16. SEAT PAN FIRING HANDLE PROBLEM (LOCATING, ETC.)
 - 17. CANOPY JETTISON PROBLEM
 - 18. CANOPY JETTISON FAILURE (AUTOMATIC MEANS)

11. AIRCRAFT ATTITUDE AND POSITION

(Either in flight or after crash, ditching, etc.)

- | | |
|--|---|
| <input type="checkbox"/> NOSE UP | <input type="checkbox"/> NOSE DOWN _____ |
| <input type="checkbox"/> RIGHT BANK | <input checked="" type="checkbox"/> LEFT BANK about 30 degrees
(at time of impact) |
| <input type="checkbox"/> A. NOSE DOWN SPIN | <input type="checkbox"/> F. DISINTEGRATION |
| <input type="checkbox"/> B. FLAT SPIN | <input checked="" type="checkbox"/> G. INVERTED
(at time of impact) |
| <input type="checkbox"/> C. OSCILLATING SPIN | <input type="checkbox"/> H. MUSHING |
| <input type="checkbox"/> D. ROLLING | <input type="checkbox"/> I. UNKNOWN |
| <input type="checkbox"/> E. TUMBLING | <input type="checkbox"/> J. OTHER (DESCRIBE) _____ |

12. EJECTION SEAT/PARACHUTE TRAINING

(Not required for passengers who had no opportunity to secure)

TYPE OF TRAINING	TOTAL HOURS IN TRAINING	DATE OF LAST TRAINING	ROLE ⁶
LECTURES/DEMONSTRATIONS			
TRAINING FILMS			
UNARMED EJECTION SEAT			
ARMED SEAT ON TOWER			
JUMP SCHOOL			
PARASAIL TRAINING			
OTHER (SPECIFY)			

*Use codes below to indicate role training played in this mission.

- 5 - NO IMPORTANCE** **3 - LACK OF TRAINING FACTOR**
1 - TRAINING DEFINITE HELP **4 - LACK OF TRAINING POSSIBLE FACTOR**
2 - TRAINING POSSIBLE HELP **9 - TRAINING BOTH UNKNOWN**

GROUND			WATER			AIR		
B	D	A	B	D	A	B	D	A
01			01			01		
02			02			02		
03			03			03		
04			04			04		
05			05			05		
06			06			06		
07			07			07		
08			08			08		
09			09			09		
10			10			10		
11			11			11		
12			12			12		
13			13			13		
14			14			14		
15			15			15		
16			16			16		
17			17			17		
18			18			18		

CONTINUED ON NEXT PAGE

OPNAV FORM 3750-8F (Rev. 4-60) (Continued)

13. EGRESS DIFFICULTIES (Place X in appropriate column) (Continued)

B - Before; D - During; A - After

19. COULD NOT OPEN CANOPY/HATCH

GROUND

B D A

19

20. DIFFICULTY RELEASING RESTRAINTS

20

21. DIFFICULTY REACHING HATCH/EXIT-OBSTRUCTIONS

21

22. DIFFICULTY REACHING HATCH/EXIT-INJURIES

22

23. DIFFICULTY REACHING HATCH/EXIT-A/C ATTITUDE

23

24. DIFFICULTY REACHING HATCH/EXIT-EQUIPMENT HANGUP

24

25. PINNED DOWN IN A/C (OTHER THAN EQUIPMENT HANGUP)

25

26. CONFUSION/PANIC/DISORIENTATION

26

27. DARKNESS-HO VISUAL REFERENCE

27

28. FIRE/SMOKE/FUEL

28

29. ANTHROPOMETRIC PROBLEM

29

30. PERSONAL EQUIPMENT FACTOR (OTHER THAN HANGUP)

30

31. UPPER EXTREMITIES HIT COCKPIT STRUCTURES

31

32. LOWER EXTREMITIES HIT COCKPIT STRUCTURES

32

33. MAN STRUCK CANOPY/CANOPY BOW

33

34. STRUCK EXTERNAL SURFACE OF AIRCRAFT

34

35. FLAILING - UPPER EXTREMITIES

35

36. FLAILING - LOWER EXTREMITIES

36

37. DROGUE SLUG SWINGING AT MAN

37

38. DROGUE SLUG STRUCK MAN

38

39. MAN STRUCK BY OTHER EQUIPMENT

39

40. MAN STRUCK BY SEAT

40

41. SEAT SEPARATION DIFFICULTY

41

42. SEAT/PARACHUTE INTANGLMENT

42

43. MAN TANGLED IN CHUTE RISERS-MAJOR

43

44. MAN TANGLED IN CHUTE RISERS-MINOR

44

45. PARACHUTE LINE CUT

45

46. MAN HELD ON TO SEAT

46

47. TUMBLING/SPINNING

47

48. PARACHUTE DID NOT OPEN

48

49. PARACHUTE STREAMED

49

50. INADVERTENT OPENING OF LAP BELT

50

51. FAILURE OF LAP BELT TO OPEN

51

52. INRUSHING WATER

52

53. COLD

53

54. UNCONSCIOUS/DAZED

54

55. OTHER

55

WATER

B D A

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

REMARKS OR CONTINUATION: (Indicate next record with code from above)

Water, 20B: initial egress attempts hampered, whether due to momentary hangup in restraints and/or position (inverted or sideways, under water) not clear.

NAME LOVELL, John R. Jr.	SERIAL NO. 712581	A/C UH-2C	BUNO 149767
-----------------------------	----------------------	--------------	----------------

MEDICAL OFFICER'S REPORT OF A/C ACCIDENT, INCIDENT OR GROUND ACCIDENT
EJECTION OR BAILOUT
OPNAV FORM 3750-9G (REV. 4-68) S/N 0107-731-0701

REPORT SYMBOL 3750-7
See Section II of OPNAV FORM 3750-8
PAGE 1 OF 2

(Complete for all in-flight escapes and bailouts)

1. TIME FROM EMERGENCY UNTIL ESCAPE ATTEMPT WAS INITIATED

HOURS MINUTES (HOURS) 06

2. DELAY IN INITIATING ESCAPE DUE TO:

- 1. ATTEMPTING TO OVERCOME PROBLEM
- 2. AVOIDING POPULATED AREA
- 3. AVOIDING UNSUITABLE TERRAIN
- 4. GAINING ALTITUDE
- 5. OTHER delay until rotors had stopped
- 6. LOSING ALTITUDE
- 7. LOSING AIRSPEED
- 8. UNKNOWN

3. TERRAIN CLEARANCE AT TIME OF:

A. 1. ESCAPE IF FEET: 8-9 under water (patient's view)
2. PARACHUTE OPENING (FEET)

B. 1. AIRSPEED AT TIME OF ESCAPE KIAS
2. GROUND/FORWARD SPEED (IF NOT AIRBORNE) K

C. 1. PARACHUTE DID NOT OPEN 2. PARACHUTE STREAMED

4. PROTECTIVE HELMET:

	CHIN STRAP FASTENED			HELMET VISOR LOWERED		
	YES	NO	UNK	YES	NO	UNK
1. BEFORE EMERGENCY	X			X		
2. DURING EGRESS	X			X		
3. DURING CHUTE LANDING						
4. CHIN STRAP FASTENED SNUGLY		X				
5. HAME STRAP FASTENED SNUGLY		X				

5. ZERO LANYARD REMAINDER OF PAGE NOT APPLICABLE

- | | |
|--|--|
| A. THEN CONNECTED | B. SURVIVAL FACTOR |
| <input type="checkbox"/> 1. AVAILABLE, NOT CONNECTED | <input type="checkbox"/> 2. NOT A FACTOR IN SURVIVAL |
| <input type="checkbox"/> 3. PRIOR TO EMERGENCY | <input type="checkbox"/> 4. FACTOR IN SURVIVAL |
| <input type="checkbox"/> 5. DURING EMERGENCY | <input type="checkbox"/> 6. NOT A FACTOR IN NON-SURVIVAL |
| <input type="checkbox"/> 7. TIME UNKNOWN | <input type="checkbox"/> 7. FACTOR IN NON-SURVIVAL |
| <input type="checkbox"/> 8. NA/NOT AVAILABLE | <input type="checkbox"/> 8. UNKNOWN IF FACTOR |
| <input type="checkbox"/> 9. UNKNOWN | |

6. AUTOMATIC LAP BELT RELEASE

- | | |
|--|--|
| <input type="checkbox"/> 1. DID NOT OPEN OR RELEASE | <input type="checkbox"/> 2. OPENED INADVERTENTLY |
| <input type="checkbox"/> 3. RELEASED AUTOMATICALLY AS DESIGNED | <input type="checkbox"/> 4. UNKNOWN HOW RELEASED |
| <input type="checkbox"/> 5. OPENED MANUALLY | <input type="checkbox"/> 6. UNKNOWN IF RELEASED |

7. REMOVAL OF AIRCRAFT CANOPY

- | | |
|---|--|
| A. INTENT | B. INITIATOR |
| <input type="checkbox"/> 1. INTENTIONAL | <input type="checkbox"/> 1. THIS INDIVIDUAL |
| <input type="checkbox"/> 2. UNINTENTIONAL, SELF-INDUCED | <input type="checkbox"/> 2. ANOTHER INDIVIDUAL |
| <input type="checkbox"/> 3. UNINTENTIONAL, MECHANICAL | <input type="checkbox"/> 3. UNKNOWN |
| <input type="checkbox"/> 4. UNKNOWN | |

7. REMOVAL OF AIRCRAFT CANOPY (Continued)

- | | |
|--|--|
| C. REMOVAL | D. METHOD |
| <input type="checkbox"/> 1. DEFINITELY NOT ATTEMPTED | <input type="checkbox"/> 1. ARM REST/LEG BRACE |
| <input type="checkbox"/> 2. ACCOMPLISHED | <input type="checkbox"/> 2. FACE CURTAIN |
| <input type="checkbox"/> 3. ATTEMPTED (UNSUCCESSFUL) | <input type="checkbox"/> 3. SEAT PAN HANDLE |
| <input type="checkbox"/> 4. UNKNOWN IF ATTEMPTED | <input type="checkbox"/> 4. MANUALLY UNLOCKED |
| | <input type="checkbox"/> 5. EXTERNAL FORCE |
| | <input type="checkbox"/> 6. CANOPY JETTISON HANDLE |
| | <input type="checkbox"/> 7. UNKNOWN |
| | <input type="checkbox"/> 8. OTHER (DESCRIBE) |

8. EJECTION

- | | |
|--|--|
| A. INTENT | C. METHOD |
| <input type="checkbox"/> 1. INTENTIONAL | <input type="checkbox"/> 1. ARM REST/LEG BRACE |
| <input type="checkbox"/> 2. UNINTENTIONAL | <input type="checkbox"/> 2. FACE CURTAIN |
| <input type="checkbox"/> 3. UNKNOWN | <input type="checkbox"/> 3. SEAT PAN HANDLE |
| B. INITIATED BY | <input type="checkbox"/> 4. SEAT SEQUENCER |
| <input type="checkbox"/> 1. THIS PERSON | <input type="checkbox"/> 5. IMPACT |
| <input type="checkbox"/> 2. ANOTHER PERSON | <input type="checkbox"/> 6. FIRE |
| <input type="checkbox"/> 3. EXTERNAL FORCE | <input type="checkbox"/> 7. MECHANICAL FAILURE |
| <input type="checkbox"/> 4. UNKNOWN | <input type="checkbox"/> 8. OTHER EXTERNAL FORCE |
| | <input type="checkbox"/> 9. UNKNOWN |

9. BODY POSITION AT EJECTION (As compared to usual)

P	A. HEAD	B. HIPS	C. FEET	D. ELBOWS
OPTIMAL	1			
FORWARD	2			
UPWARD	3			
LATERAL	4			
UNKNOWN	5			

10. POSITION OF EJECTION SEAT

- | | |
|---------------------------------------|---|
| <input type="checkbox"/> 1. FULL UP | <input type="checkbox"/> 2. INTERMEDIATE POSITION |
| <input type="checkbox"/> 3. FULL DOWN | <input type="checkbox"/> 4. UNKNOWN |

11. METHOD OF SEPARATING MAN FROM SEAT

- | | |
|--|---|
| <input type="checkbox"/> 1. DID NOT SEPARATE | <input type="checkbox"/> 4. PERSONNEL PARACHUTE |
| <input type="checkbox"/> 2. SEAT SEPARATOR | <input type="checkbox"/> 5. OTHER |
| <input type="checkbox"/> 3. SPONTANEOUS/TUMBLING | <input type="checkbox"/> 6. UNKNOWN |
| <input type="checkbox"/> 4. PUSHED SELF AWAY | |

NAME

LOVELL, John R. Jr.

SERIAL NO.

712581

A/C

105-32

BUNO

149767

CONTINUED ON REVERSE SIDE

12. TYPE OF SEAT SEPARATION

- | | |
|-------------------------------------|--|
| <input type="checkbox"/> A. NONE | <input type="checkbox"/> B. PARACHUTE |
| <input type="checkbox"/> C. ROTARY | <input type="checkbox"/> D. SHOOTING LANYARD |
| <input type="checkbox"/> E. BLADDER | |

13. METHODS OF DEPLOYING PARACHUTE

- | | |
|--|---|
| <input type="checkbox"/> A. NOT DEPLOYED | <input type="checkbox"/> B. STATIC LINE |
| <input type="checkbox"/> C. AUTOMATIC TIMER | <input type="checkbox"/> D. MANUAL |
| <input type="checkbox"/> E. ANEROID | <input type="checkbox"/> F. OTHER |
| <input type="checkbox"/> G. BALLISTIC DEVICE | <input type="checkbox"/> H. UNKNOWN |
| <input type="checkbox"/> I. ZERO LANYARD | |

14. PARACHUTE OPENING SHOCK

- | | |
|--|-------------------------------------|
| <input type="checkbox"/> A. NEGLIGIBLE | <input type="checkbox"/> B. SEVERE |
| <input type="checkbox"/> C. MODERATE | <input type="checkbox"/> D. UNKNOWN |

15. OSCILLATIONS

	1-NEGIGIBLE	2-MODERATE	3-SEVERE	4-UNKNOWN
A. DURING DESCENT				
B. DURING LANDING				

16. PARACHUTE DAMAGE (Give number of)

- | | |
|-------------------------|----------------------|
| 1. SEVERED SHROUD LINES | 3. TORN PANELS-MAJOR |
| 2. MISSING PANELS | 4. TORN PANELS-MINOR |

17. CAUSE OF PARACHUTE DAMAGE

- | | |
|--|--|
| <input type="checkbox"/> 1. OPENING SHOCK | <input type="checkbox"/> 4. IN TREES |
| <input type="checkbox"/> 2. FOULLED ON EJECTION SEAT | <input type="checkbox"/> 5. DRAGGING |
| <input type="checkbox"/> 3. FOULLED ON A/C | <input type="checkbox"/> 6. OTHER (DESCRIBE) |
| <input type="checkbox"/> 4. FIRE | <input type="checkbox"/> 7. UNKNOWN |
| <input type="checkbox"/> 5. ON LANDING | |

18. FOUR LINE CUT DISREGARD (Air Force Item only)

19. DIRECTION FACED AT CHUTE LANDING

- | | |
|--|---|
| <input type="checkbox"/> 1. DIRECTLY FACING | <input type="checkbox"/> 4. QUARTERING, BACK |
| <input type="checkbox"/> 2. FACING AWAY | <input type="checkbox"/> 5. DIRECTLY SIDEWAYS |
| <input type="checkbox"/> 3. QUARTERING, FACING | <input type="checkbox"/> 6. UNKNOWN |

20. LANDING CONDITIONS

- | | |
|----------------------------------|--|
| A. TOTAL WEIGHT UNDER PARACHUTE: | LBS |
| B. SURFACE WINDS: | KNOTS |
| C. DRAGGED BY CHUTE: | <input type="checkbox"/> A. YES <input type="checkbox"/> B. NO |
| D. DISTANCE DRAGGED: | FEET |

21. PARACHUTE LANDING POSITION TECHNIQUES

- | | | | |
|----|--|----|---|
| A. | <input type="checkbox"/> 1. COULD NOT SEE | C. | <input type="checkbox"/> 1. MUSCLES TENSED |
| | <input type="checkbox"/> 2. LOOKING AHEAD | | <input type="checkbox"/> 2. MUSCLES TOO TENSE |
| | <input type="checkbox"/> 3. LOOKING DOWN | | <input type="checkbox"/> 3. TOO RELAXED |
| | <input type="checkbox"/> 4. OTHER | | <input type="checkbox"/> 4. OTHER |
| | <input type="checkbox"/> 5. UNKNOWN | | <input type="checkbox"/> 6. UNKNOWN |
| B. | <input type="checkbox"/> 1. FELL OBLIQUELY | D. | <input type="checkbox"/> 1. PROPER POSITION |
| | <input type="checkbox"/> 2. FELL BACKWARD | | <input type="checkbox"/> 2. KNEES LOCKED |
| | <input type="checkbox"/> 3. FELL FORWARD | | <input type="checkbox"/> 4. ARMS IN POOR POSITION |
| | <input type="checkbox"/> 5. OTHER | | <input type="checkbox"/> 6. OTHER |
| | <input type="checkbox"/> 7. UNKNOWN | | <input type="checkbox"/> 8. UNKNOWN |

22. DEPLOYED BEFORE LANDING

- | | | | |
|-----------------|---------|---------|---------------|
| A. SURVIVAL KIT | I - YES | II - NO | III - UNKNOWN |
| B. LIFE RAFT | | | |
| C. LIFE VEST | | | |

23. CANOPY DEFLECTION POCKETS

- | |
|---|
| <input type="checkbox"/> A. NOT EFFECTIVE IN COLLAPSING CHUTE |
| <input type="checkbox"/> B. AIDED IN COLLAPSING CHUTE |
| <input type="checkbox"/> C. NOT INSTALLED |
| <input type="checkbox"/> D. UNKNOWN IF INSTALLED |
| <input type="checkbox"/> E. UNKNOWN IF EFFECTIVE |

REMARKS:

T-10A

D-10A

P-10A

S-10A

1. SURVIVAL TRAINING

* Use Code as right to indicate the role this person's training played in survival.

2 - NOT A FACTOR
3 - DEFINITELY HELPED
4 - POSSIBLY HELPED

5 - LACK OF TRAINING DEFROTE FACTOR
6 - LACK OF TRAINING POSSIBLE FACTOR
7 - ROLE UNKNOWN

TYPE TRAINING	COURSE AND SPONSOR	PLACE ACCOMPLISHED	COMPLETED		*ROLE
			Month	Year	
A. WATER SURVIVAL	Survival Swims, HC-5	I.B., Calif.	Oct	68	1
1. MAINTENANCE SWIM	RART	NAS, Pensacola	Feb	67	1
2. BILGEY BUNKER	DREST	NAS, NORIS	Jan	69	1
3. PARACHUTE DRAG					
4. IMMERSED COCKPIT					
5. IMMERSED SEAT					
B. JUNGLE SURVIVAL					
C. ARCTIC SURVIVAL					
D. DESERT SURVIVAL					
E. MOUNTAIN SURVIVAL					
F. SURVIVAL (GENERAL)	SOCRUS	Warner Springs, Cal.	Dec	68	0

2. CONDITIONS PREVAILING AT SURVIVAL/RESCUE SITE (If widely variable, give range)

A. WATER TEMPERATURE 88 °F
B. AIR TEMPERATURE 88 °F
C. SURFACE WINDS 17 KNOTS
D. WAVE HEIGHT 2 FEET
E. WAVE FREQUENCY PER MIN.
Swell 2-3 feet

F. TERRAIN
 1. OPEN GROUND
 2. FOREST/THICKET
 3. MOUNTAINS
 4. DESERT

G. WEATHER
 1. WATER
 2. ICE/SNOW
 3. SWAMP
 4. OTHER
 9. UNKNOWN

5. CLEAR
 2. OVERCAST
 3. FOG
 4. RAIN
 5. SNOW

6. SLEET
 7. HAIL
 8. OTHER
 9. UNKNOWN

3. TIME LAPSE SEQUENCE FOR RESCUE EVENTS (Give time lapses in hours and minutes from time of mishap)

Vehicles used for rescue were DD 760 and its motor whale boat, both of which, essentially, were together at the time of mishap.	ACTUAL AMOUNT	OTHER AMOUNT	OTHER AMOUNT	LIGHT CONDITIONS
A. RESCUE PERSONNEL NOTIFIED THAT MISHAP HAD OCCURRED	witnessed		X	
B. RESCUE VEHICLE DEPARTED	immediately		X	
C. THIS INDIVIDUAL LOCATED BY RESCUE PERSONNEL	immediately		X	
D. THIS INDIVIDUAL PHYSICALLY REACHED BY RESCUE VEHICLE PERSONNEL	1 min approx		X	
E. THIS INDIVIDUAL ACTUALLY ABOARD RESCUE VEHICLE OR RESCUE ATTEMPT ABANDONED	11 min approx		X	
F. RESCUE COMPLETED (PERSON RETURNED TO STATION, HOSPITAL, ETC.)	57 min (i.e. returned to CVA 31)		X	

4. A. TIME THIS INDIVIDUAL SPENT IN WATER

HRS. 11 MIN. 00

B. TIME THIS INDIVIDUAL SPENT IN LIFE RAFT

HRS. 0

MIN. 0

5. AT TIME OF RESCUE ALERT, DISTANCE IN MILES FROM MISHAP SITE TO:

A. ACTUAL RESCUE VEHICLE 1000 yards

B. NEAREST ASSIST RESCUE VEHICLE

6. PERSONNEL/VEHICLES PARTICIPATING IN RESCUE

A. VEHICLE PERFORMING ACTUAL PICKUP OF THIS PERSON

1. TYPE/MODEL: DD 760 2. LOCATION WHEN ALERTED 1000 yards ASSEMBLY WHEN ALERTED CVA 31

B. DID RESCUE PERSONNEL LEAVE VEHICLE TO ASSIST IN RESCUE?
IF SO, HOW?

1. YES 2. NO 3. UNKNOWN

4. PARACHUTED

5. DESCENDED LINE/LADDER/NET

6. NORMAL GROUND/WATER

7. JUMPED WITHOUT PARACHUTE

8. LOWERED BY HOIST

9. OTHER

C. LIST OTHER VEHICLES PARTICIPATING IN RESCUE EFFORT: (OTHER ASSISTS IN ITEM 21)

OTHERS WHO STOOD BY READY TO RENDER ASSISTANCE IF REQUIRED:

D. NUMBER SEARCH AND RESCUE HOURS 0.2 (or roughly 0.4 if whale boat and DD are considered separately.

CONTINUED ON REVERSE SIDE

NAME: LOVELL, John R.

SERIAL NO.

712581

AC

UH-2C

DRNO

149767

7. RESCUE EQUIPMENT USED (Use numbers to show sequence)

- | | |
|---|--|
| <input checked="" type="checkbox"/> A - SLING (horse collar) | <input type="checkbox"/> H - GRAPNEL |
| <input type="checkbox"/> B - SEAT | <input type="checkbox"/> I - BOARDING LADDER |
| <input type="checkbox"/> C - CARGO NET | <input type="checkbox"/> J - KNIFE/Axe/AX |
| <input type="checkbox"/> D - ROPS | <input type="checkbox"/> K - JACKSTAFF CARRIER/SUPPORT |
| <input type="checkbox"/> E - LIFE RING | <input type="checkbox"/> L - FIRST AID EQUIPMENT |
| <input type="checkbox"/> F - SAILSET | <input type="checkbox"/> M - TREE PENETRATOR SEAT |
| <input type="checkbox"/> G - BOOM NET | <input type="checkbox"/> N - HELICOPTER PLATFORM |
| <input checked="" type="checkbox"/> H - DAVY forecastle davit, DD 760 | <input type="checkbox"/> O - STRETCHER |
| <input type="checkbox"/> J - DRAFT | <input type="checkbox"/> P - CABLE CUTTERS |
| <input type="checkbox"/> K - VESSING CUTTERS | <input type="checkbox"/> Q - HELICOPTER RESCUE ROOM |
| <input type="checkbox"/> L - CHICAGO GRIP | <input type="checkbox"/> R - BILLY PUSH NET |
| <input type="checkbox"/> Y - OTHER (DESCRIBE) _____ | |

8. RESCUE ALERTING MEANS (Use numbers to show sequence)

- | | |
|---|---|
| <input checked="" type="checkbox"/> A - WITNESSED | <input type="checkbox"/> H - RADIO SURVIVAL TYPE |
| <input type="checkbox"/> B - RADAR SURVEILLANCE | <input type="checkbox"/> I - OTHER RADIO REPORT (carrier to DD) |
| <input type="checkbox"/> C - OVERDUE REPORT TO SAR | <input type="checkbox"/> J - VISUAL SIGNALLING EQUIPMENT |
| <input type="checkbox"/> D - AIRBORNE RADIO RELAY | <input type="checkbox"/> K - AUDIO SIGNALLING EQUIPMENT |
| <input type="checkbox"/> E - CRASH PHONE | <input type="checkbox"/> L - SURVIVOR REPORT |
| <input type="checkbox"/> F - OTHER TELEPHONE | <input type="checkbox"/> M - LOSS OF RADIO CONTACT |
| <input type="checkbox"/> G - RADIO MAY-DAY CALL | <input type="checkbox"/> N - SMOKE/FIRE - CRASH SCENE |
| <input type="checkbox"/> Y - OTHER (DESCRIBE) _____ | |

9. ALERTING/COMMUNICATIONS PROBLEMS

- | | |
|--|---|
| <input type="checkbox"/> A - POOR RADIO RECEPTION | <input type="checkbox"/> D - AIRCRAFT RADIO/IFF EQUIPMENT INOPERATIVE |
| <input type="checkbox"/> B - TELEPHONE LINE BUSY | <input type="checkbox"/> E - POOR RADIO PROCEDURES |
| <input type="checkbox"/> C - POOR RADIO DISCIPLINE | <input type="checkbox"/> F - OTHER |
| <input type="checkbox"/> Y - OTHER _____ | |

10. DELAYS IN DEPARTURE OF RESCUE VEHICLE

- | |
|--|
| <input type="checkbox"/> A - VEHICLE OPERATOR NOT AVAILABLE |
| <input type="checkbox"/> B - VEHICLE NOT READY |
| <input type="checkbox"/> C - VEHICLE CREW NOT AVAILABLE |
| <input type="checkbox"/> D - COMMUNICATIONS BREAKDOWN |
| <input type="checkbox"/> E - COMPLETING PREVIOUSLY ASSIGNED DUTIES |
| <input type="checkbox"/> F - LACK OF INFORMATION ON CRASH SITE |
| <input type="checkbox"/> G - NATURE OF TERRAIN |
| <input type="checkbox"/> H - WEATHER |
| <input type="checkbox"/> Y - OTHER |

11. RESCUE VEHICLE PROBLEMS ENROUTE

- | | |
|--|---|
| <input type="checkbox"/> A - HEADWIND | <input type="checkbox"/> E - NATURE OF TERRAIN |
| <input type="checkbox"/> B - POOR VISIBILITY | <input type="checkbox"/> F - OTHER OBSTRUCTIONS (FENCE, ETC.) |
| <input type="checkbox"/> C - HIGH SEA STATE | <input type="checkbox"/> G - RESCUERS LOST |
| <input type="checkbox"/> D - MECHANICAL PROBLEMS | <input type="checkbox"/> H - WEATHER |
| <input type="checkbox"/> Y - OTHER | |

12. PROBLEMS IN LOCATING INDIVIDUAL (OR KEEPING IN SIGHT)

- | | |
|--|---|
| <input type="checkbox"/> A - HEAVY SEAS | <input type="checkbox"/> D - PRECIPITATION |
| <input type="checkbox"/> B - TREES | <input type="checkbox"/> E - DARKNESS |
| <input type="checkbox"/> C - FOG/CLOUDS | <input type="checkbox"/> F - RADIO INTERFERENCE |
| <input type="checkbox"/> G - CONFUSION DUE TO OTHER LIGHTS | |
| <input type="checkbox"/> H - MALFUNCTION OF DIRECTIONAL EQUIPMENT | |
| <input type="checkbox"/> J - LACK OF CORRECT INFORMATION ON LOCATION OF SURVIVOR | |
| <input type="checkbox"/> K - INABILITY TO VISUALLY DISTINGUISH SURVIVOR FROM TERRAIN | |
| <input type="checkbox"/> L - LOSS OF RADIO/RADAR CONTACT | |
| <input type="checkbox"/> M - SURVIVOR'S FAILURE TO USE SIGNALLING EQUIPMENT | |
| <input type="checkbox"/> Y - OTHER | |

13. LOCATOR MEANS

Consult Instructions for listing of specific locator means and enter under appropriate categories. Use numbers to indicate sequence of observations.

GENERAL	PYROTECHNIC	ELECTRONIC SIGNAL DEVICES	BALLISTICS	AUDITORY	VISUAL
1. 01,02					

CONTINUED ON NEXT PAGE

- | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|---|--|--|--|--|---|--|--|---|--|--|---|--|--|---|---|---|--|--|---------------------------------------|---------------------------------------|---|---------------------------------------|
| <input checked="" type="checkbox"/> #1 - INADEQUATE FLOTATION GEAR
With both CO2 chambers of his life vest inflated | <input checked="" type="checkbox"/> #2 - INADEQUATE COLD WEATHER GEAR
inflated chamber), co-pilot states at times swells came over his head. | <input type="checkbox"/> #3 - INADEQUATE MEDICAL EQUIPMENT | <input type="checkbox"/> #4 - LACK OF OTHER EQUIPMENT | <input type="checkbox"/> #5 - ENTANGLEMENT (PARACHUTE) | <input type="checkbox"/> #6 - DRAGGING (PARACHUTE) | <input type="checkbox"/> #7 - PARACHUTING HARDWARE PROBLEM | <input type="checkbox"/> #8 - ENTRAPMENT IN AIRCRAFT | <input type="checkbox"/> #9 - OTHER _____ | <input type="checkbox"/> #10 - ENTANGLEMENT (OTHER THAN PARACHUTE) | <input type="checkbox"/> #11 - UNFAMILIAR WITH PROCEDURE/EQUIPMENT | <input type="checkbox"/> #12 - CONFUSED, DAZED, DISORIENTED | <input type="checkbox"/> #13 - INCAPACITATED BY INJURY | <input type="checkbox"/> #14 - POOR PHYSICAL CONDITION | <input type="checkbox"/> #15 - EXPOSURE (HEAT, COLD, SUNBURN, ETC.) | <input type="checkbox"/> #16 - FATIGUE | <input type="checkbox"/> #17 - WEATHER | <input type="checkbox"/> #18 - TOPOGRAPHY (ROUGH SEAS, MOUNTAINS, ETC.) | <input type="checkbox"/> #19 - DARKNESS | <input type="checkbox"/> #20 - THROWN OUT OF RAFT | <input type="checkbox"/> #21 - HAMPERED BY HELD DOWNWASH | <input type="checkbox"/> #22 - PROBLEM BOARDING RESCUE VEHICLE | <input type="checkbox"/> #23 - THIRST | <input type="checkbox"/> #24 - HUNGER | <input type="checkbox"/> #25 - INSECTS, SHAKES, ANIMALS, ETC. | <input type="checkbox"/> #26 - SHARKS |
|---|--|--|---|--|--|--|--|---|--|--|---|--|--|---|--|--|---|---|---|--|--|---------------------------------------|---------------------------------------|---|---------------------------------------|

15. PROBLEMS THAT COMPLICATED RESCUE OPERATIONS

- | | |
|---|---|
| <input type="checkbox"/> #1 - FAILURE OF RESCUE VEHICLE (MECHANICAL PROBLEMS) | <input type="checkbox"/> #13 - PANIC/INAPPROPRIATE ACTIONS OF PERSON BEING RESCUED |
| <input type="checkbox"/> #2 - INADEQUACY/LACK OF RESCUE VEHICLE | <input type="checkbox"/> #14 - RESCUE VEHICLE ACCIDENT |
| <input type="checkbox"/> #3 - FAILURE OF RESCUE EQUIPMENT (HOIST, ETC.) | <input type="checkbox"/> #15 - COMMUNICATIONS PROBLEMS |
| <input type="checkbox"/> #4 - INADEQUACY/LACK OF RESCUE EQUIPMENT | <input type="checkbox"/> #16 - DRAG/ENTANGLEMENT BY DEPLOYED PARACHUTE |
| <input checked="" type="checkbox"/> Condition of those rescued that whale boat crew and those operating hoist aboard DD seemed rather inexperienced in rescue procedures and techniques. | <input type="checkbox"/> #17 - TOPOGRAPHY (ROUGH SEAS, MOUNTAINS, ETC.) |
| <input type="checkbox"/> #5 - INADEQUATE RESCUE PERSONNEL KNOWLEDGE/TRAINING | <input type="checkbox"/> #18 - INTERFERENCE FROM OTHER VEHICLES |
| <input type="checkbox"/> #6 - INADEQUATE MEDICAL EQUIPMENT | <input type="checkbox"/> #19 - VICTIM PULLED AWAY BY EXTERNAL FORCES |
| <input type="checkbox"/> #7 - INADEQUATE MEDICAL FACILITIES | <input type="checkbox"/> #20 - WEATHER |
| <input type="checkbox"/> #8 - VEHICLE OPERATOR FACTOR (POOR PROCEDURE) | <input type="checkbox"/> #21 - DARKNESS |
| <input type="checkbox"/> #9 - RESCUE CREWMAN ASSIST HESITANCY | <input type="checkbox"/> #22 - WEIGHT/DRAG PROBLEM NOT DUE TO PARACHUTE |
| <input type="checkbox"/> #10 - FIRE/EXPLOSION | <input type="checkbox"/> #23 - HAMPERED BY PERSONNEL/SURVIVAL EQUIPMENT OF PERSON BEING RESCUED |
| <input type="checkbox"/> #11 - ENTRAPMENT IN AIRCRAFT | <input type="checkbox"/> #24 - FLOATING DEBRIS |
| <input type="checkbox"/> #12 - PHYSICAL LIMITATIONS OF RESCUE PERSONNEL | <input type="checkbox"/> #25 - PRIMARY RESCUE DELAYED AWAITING FUTILE ATTEMPTS BY OTHER RESCUEERS |
| <input type="checkbox"/> #13 - PHYSICAL LIMITATIONS OF PERSON BEING RESCUED | <input type="checkbox"/> #26 - HAMPERED BY HELICOPTER DOWNWASH |
| <input type="checkbox"/> #14 - CARELESSNESS OF RESCUE PERSONNEL | |
| <input type="checkbox"/> #15 - OTHER _____ | |

16. INDIVIDUAL'S PHYSICAL CONDITION	DURING RESCUE	AFTER RESCUE	DURING RESCUE	AFTER RESCUE
1. FULLY ABLE TO ASSIST	1 - <input checked="" type="checkbox"/>	A - <input checked="" type="checkbox"/>		E -
2. PARTIALLY ABLE TO ASSIST	2 - <input type="checkbox"/>	B - <input type="checkbox"/>		F -
3. IMMOBILE OR UNCONSCIOUS	3 - <input type="checkbox"/>	C - <input type="checkbox"/>		G -
4. FATAL ON RECOVERY-DUE TO INJURIES	4 - <input type="checkbox"/>	D - <input type="checkbox"/>		H -
			5. FATAL ON RECOVERY-DROWNED	
			6. RECOVERED ALIVE-DIED FROM INJURIES	
			7. LOST DURING RESCUE ATTEMPT-PRESUMED DROWNED	
			8. LOST DURING RESCUE ATTEMPT-APPARENTLY INJURED OR DROWNED	

17. CHECK CATEGORY OF FACTORS THAT HELPED RESCUE/RECOVERY (FROM RESCUER POINT OF VIEW)

- | | |
|--|--|
| <input checked="" type="checkbox"/> 1 - RESCUE PERSONNEL TRAINING | <input checked="" type="checkbox"/> 6 - AVAILABILITY OF RESCUE EQUIPMENT |
| <input checked="" type="checkbox"/> 2 - TRAINING OF PERSON TO BE RESCUED | <input checked="" type="checkbox"/> 7 - SUITABILITY OF RESCUE EQUIPMENT |
| <input type="checkbox"/> 3 - KNOWLEDGE OF AIRCRAFT EMERGENCY ESCAPE MEANS | <input checked="" type="checkbox"/> 8 - SURVIVOR'S TECHNIQUES |
| <input type="checkbox"/> 4 - KNOWLEDGE OF PERSONNEL EQUIPMENT RELEASES/ACTUATORS | <input type="checkbox"/> 9 - COORDINATION OF RESCUE EFFORTS |
| <input type="checkbox"/> 5 - RESCUE PROCEDURES/PRE-ACCIDENT PLANS | |

NAME	SERIAL NO.	A/C	BUND
LOVELL, John R. Jr.	712561	UB-20	149767

(b) (6), (b) (5)

Statement of Co-pilot LTJO John R. LOVILL, USN, 712581/135, (O-1),
DET-31, AAR 1-70A, occurring 10 August 1969, pilot UNKNOWN

I was the co-pilot in aircraft 00, with LT [REDACTED] the
pilot. We had made several trips around the plane guard pattern.
The aircraft was flying normally with no indication of any impending
malfunctions. (b) (6)

The pilot made the turn to upwind, parallelling the carrier.
At this time we were at 150 feet altitude, 70-80 knots air speed.
We were flying at normal altitude pitch wise. It's possible the air
speed may have been 90 knots, but no more than 90 knots. The turn
was not unusual. I estimate it was between 10°-20° angle of bank.
We were into the wind at 150 feet. Descent was started and I noted
the rate after we were established. It was 500 feet per minute; no
more. I took this from the VSI. I estimate we were at approximately
90 to 100 feet at the time I noted the rate of descent. We were
transitioning to a hover as one transitions for a night rescue type
hover. By this I mean that we did not have an excessive rate of
descent or excessive reduction of airspeed. I shifted my eyes outside
the cockpit to note closure with the water and our relative position
in relation to the carrier and horizon. At this time I saw (side
vision) LT (b) (6) start in with the collective. I also felt the
descent slow. I believe our altitude at this time to have been about
50-60 feet due to the relationship of horizon and perspective of
carrier. As the descent was initially slowed, a violent pitch up
and to the right was felt. I saw LT (b) (6) attempt to maintain
control by putting in left stick. At this time, the aircraft felt
uncontrollable to me. It then made two violent jolts to the left
and impacted the water at approximately 60-70 degrees left bank.
The time lapse between first indication of malfunction to impact
was probably no more than 5 seconds. I had time to think that we
were going uncontrollable, shut boost off. Then I thought, pull
the flotation gear. We're going in. We had impacted the water.

After contact with the water the aircraft rolled putting the
port door, my escape route, under water. After the aircraft settled
and most motion stopped I released my lap belt and tried to escape.
The cockpit was under water at this time, and I was sitting in either
an inverted position or hanging sideways. This attempt at escape
was unsuccessful. I then again released my lap belt, and escaped
the lap belt and shoulder harness away to make sure I was free. I
pulled myself from the halo and when clear of the cockpit, I inflated
both chambers of my life vest. When I reached the surface,
I saw the pilot and the crewman. I had some difficulty keeping high
enough out of the water to keep the swell from covering my air tubes.

SPECIAL HANDLING REQUIRED
IN ACCORDANCE WITH
OPNAVINST 3750.3 SERIES

Photocopy (5)

We were picked from the water by the plane guard helicopter. I was hoisted aboard along with airmen (b) (6), LT (b) (6) aided aircrewman (b) (6) [REDACTED] who had a broken left arm. They were put into the destroyer's whaleboat. We were checked by a corpsman on the destroyer. LT (b) (6) [REDACTED] aircrewman (b) (6) [REDACTED] and I were then transferred to the USS DON HOUKE DDG 100 by a hoist on the USS KITTY HAWK.



John R. LOVELL
LTJO USNR

SPECIAL HANDLING REQUIRED
IN ACCORDANCE WITH
OPNAVINST 3750.8 SERIES

(b) (6), (b) (5)



SPECIAL HANDLING REQUIRED
IN ACCORDANCE WITH
OPNAVINST 3750.6 SERIKA

Enclosure (4)

(b) (6), (b) (5)



SPECIAL HANDLING REQUIRED
IN ACCORDANCE WITH
OPNAVINST 7504.3 SERIE

(b) (6), (b) (5)

(b) (6)

SPECIAL HANDLING REQUIRED
IN ACCORDANCE WITH
OPNAVINST 3750.6 SERIES

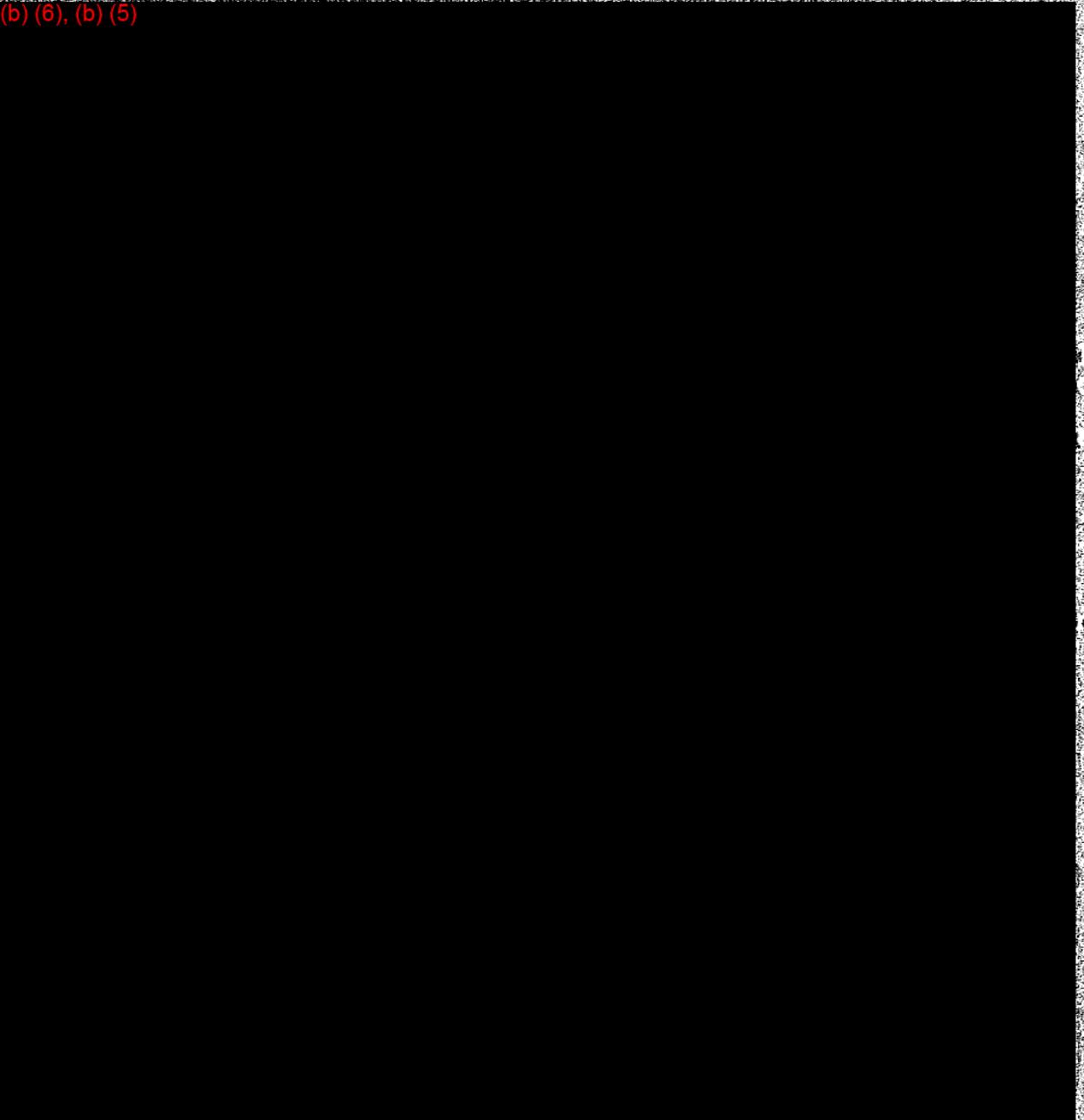
(b) (6), (b) (5)



SPECIAL HANDLING REQUIRED
IN ACCORDANCE WITH
OPNAVINST 7750.3 SERIES

100-111

(b) (6), (b) (5)



SPECIAL HANDLING REQUIRED
IN ACCORDANCE WITH
DPNAVINST 3750.6-3 SERIES

ENCL B (4)

20 August 1969

Statement of LTJO John R. LOVELL, 712581/1915, Survival Equipment Officer, HO-1 DET 31 MM SER I-70A occurring 10 August 1969, pilot (b)(6)

The survival equipment used in this mishap functioned properly. The parachute riggers inspection of all survival equipment used showed no malfunctions or discrepancies.

All personnel made underwater egresses from the plane. The pilot, LT (b)(6) experienced no difficulties on egress. He remembers pushing off his seat with his feet, coming straight to the surface and inflating his MK-3C. The A/C must have been portside down at this time. LT (b)(6) was the first to surface. The "1st" aircrewman, ADV2 (b)(6) was thrown from the starboard side of the A/C to the portside on impact. He experienced difficulty releasing his gunner's bolt due to broken left arm on impact, his initial attempt being immediately following the impact. He then waited until A/C motion stopped, released the bolt, egressed from the A/C, and either inflated his MK-3C while surfacing or after surfacing. (b)(6) was the second to surface,

The "2nd" aircrewman, AN (b)(6) was forced by in rushing water from the port side of the A/C to the starboard side after impact. He experienced some delay in releasing the gunner's bolt as the bolt and latch had clipped to his left side. He released the bolt and egressed by swimming straight up through the rescue door (the starboard side). When he reached surface he inflated the UDR vest. He was the third to surface.

The copilot, LTJO LOVELL, initiated egress after impact as the cockpit was filled with water. He released the lap belt, but it apparently was not completely free, for a try at egress was unsatisfactory. Whether he was held in the aircraft by the incoming water as A/C rolled left is not known. After the apparent motion stopped he released the latch on the lap belt and freed the lap belt from the shoulder harness. He then egressed the A/C by grabbing the copilot door frame of fuselage and by pulling down and out he cleared the cockpit. He inflated his MK-2 on the way to the surface. He was the fourth and final member of the crew to surface.

Survival equipment available to personnel at the time of the mishap: The pilot, LT (b)(6) had with him a nomex flt suit, nomex gloves, L-R1 liferaft, MK-3C lifevest, MK-79 pencil flare gun, abrund cutter, signal light strobe, signal light, SPH-9B helmet, and flight boots - steel toes. LT (b)(6) used in the survival phase, nomex flt suit, L-R1 liferaft, SPH-9B helmet, one K-13 no day night flare from his MK-3C lifevest, MK-3C lifevest and flight boot.

The copilot, LTJO LOVELL, had with him a nomex flt suit, nomex flt gloves, APH-6 helmet, L-R1 liferaft, MK-79 pencil flare gun, signal light strobe, flight boots - steel toes, MK-2 lifevest and 5" survival knife. LTJO LOVELL used the nomex flt suit, nomex gloves, APH-6 helmet, flt boots and MK-2 lifevest.

SPECIAL HANDLING REQUIRED
IN ACCORDANCE WITH
OPNAVINST 3750.6 SERIES

Enclosure 1

(b) (6)

The 1st aircrewman, [REDACTED] had with him an SU-2A survival vest, complete, SPN-1b life vest, MK-30 life vest, nomex flight suit, flight gloves, and flight boots steel toes. (b) (6) used nomex flight nomex gloves, MK-10 13" vest and flight boots. His helmet was lost after impact. The chin strap was not secured.

The 2nd aircrewman, (b) (6) had with him UDT vest - belt with mod O flares, nomex flight suit, nomex flight gloves, flight boots, and survival knife. He used the nomex flight suit, flight boots, one MK-13 mod O day vision the UDT life vest. His helmet was lost after impact. It was used during impact. He hit his head and received no injury, the chin strap was not secured.

Of the survival equipment available other than life vests, little was used except the two day-night flares due to the close proximity of the plane guard destroyer. The mishap occurred in close vicinity of both the operating CVN and plane guard destroyer.

If this mishap occurred at night and away from CVN or destroyer and the 2nd crewman been separated from other survivors or the only one he would have been ill equipped for his survival situation. His regular life vest with survival equipment attached, MK-30 with SV-1 survival vest, was lost on impact since he had it off while operating as swimmer for the flight. He now wears the UDT vest and belt under his flight suit with regular survival vest and life vest MK-30 over flight suit to preclude the loss of this valuable survival gear in the event of other similar mishaps.

All personnel had received desert dunker training. (b) (6) thought it valuable and should be fitted to the hole environment.


J. R. LOVSOLT
LTJC USMC

SPECIAL HANDLING REQUIRED
IN ACCORDANCE WITH
OPNAVINST 3750.1, SERP

(b) (6), (b) (5)

SPECIAL HANDLING REQUIRED
IN ACCORDANCE WITH
OPNAVINST 3706.6 SERIES

ENCL D BY 1 (3)

ACCIDENT REPORT
SOLAR/SEASAT-1 (L-1)

SPECIAL ATTENTION ADVISED IN ACCORDANCE WITH COMINT PRACTICE
INSTRUCTIONS AND DATA

D-1

USS JOHN W THOMAS (DD-760)

162700Z

162700Z

1. LOCATION AND NUMBER OF READING VEHICLES

PRIMARY PLANE GUARD FOR QVA-31

8000 DD NAVY

2. TIME OF REPORTING

162700Z

162700Z

162700Z

3. TIME OF OCCURRENCE OF EVENTS (L-100 FT. FROM QVA-31)

1624H

VISUAL

1624H

88

1624H

88

4. DISTANCE FROM QVA-31

1624H

1000 YDS

1624H

2

1624H

1.5

5. APPROXIMATE POSITION

1628H

NONE

1628H

3

1628H

5.5

6. APPROXIMATE POSITION

1638H

SMOKE FLARE

1638H

1.5

1638H

2

7. APPROXIMATE POSITION

1638H

ORANGE SMOKE FLARE

1638H

1.5

1638H

2

8. APPROXIMATE POSITION

1645H

RETURNED TO QVA-31

1645H

1.5

1645H

2

9. APPROXIMATE POSITION

1721H

LOCATION (U//CONFIDENTIAL INFORMATION)

1721H

1.5

1721H

2

10. APPROXIMATE POSITION

1721H

RETENTION, POST-RETRIEVAL

1721H

1.5

1721H

2

NONE

II. PERSONNEL REQUIRING RESCUE

NAME, LAST NAME FIRST INITIAL

GIVE REASON FOR RESCUE

RESCUE

RESCUE

(b) (6)

ROTOR FAILURE

RESCUE

LOVELL, JOHN R.

ROTOR FAILURE

SORE BACK

(b) (6)

ROTOR FAILURE

(b) (6)

(b) (6)

ROTOR FAILURE

NONE

III. ATTACH ENCLOSURES: MAPS/PILOTS OF SEARCH LOCATION AND DIACTIONARY

(b) (6)

MAPS/PILOTS OF SEARCH LOCATION AND DIACTIONARY

MAPS/PILOTS OF SEARCH LOCATION AND DIACTIONARY

MAPS/PILOTS OF SEARCH LOCATION AND DIACTIONARY

(b) (6)

MAPS/PILOTS OF SEARCH LOCATION AND DIACTIONARY

MAPS/PILOTS OF SEARCH LOCATION AND DIACTIONARY

MAPS/PILOTS OF SEARCH LOCATION AND DIACTIONARY

(b) (6)

MAPS/PILOTS OF SEARCH LOCATION AND DIACTIONARY

MAPS/PILOTS OF SEARCH LOCATION AND DIACTIONARY

MAPS/PILOTS OF SEARCH LOCATION AND DIACTIONARY

NNVNO 47-1-469 CZCBLA260
PITEZYUH RUMFHOLPAJ 2360631-24 AUG 69 CLAS 392
Z'Y EEEES ZYO RUMFSHH
P R 240631Z AUG 69
FM USS BON HOMME RICHARD
TO RUVJUUA/COMNOVAIRPAC
INFO RUVJUMTA/HELSUPRON ONE
RUVJUMTA/COMTPATREDTEGO
RUVJUMSA/COMFAIRWESTPAC
RUDILSA/VAVSAFECCN
BT
UNCLAS E F T O

RELSUPRON ONE DET THIRTY ONE
A. YOUR 230050Z AUG 69
B. MY 121531Z AUG 69
C. MY 141159Z AUG 69

1. IAW REF A BLADE SER NR AI-1680, AI-1803, 01-3123, 01-1212
1AC-172 WAS INCORR ON 24 JUL 69.
2. REF A REQ INFO TO SUBSTANTIATE OR REFUTE THE POSSIBILITY OF
BLADE FAILURE.
3. ALTHOUGH THE ACCIDENT BOARD HAS NOT YET COMPLETED ITS REPORT
THE IDEA OF COMPLETE BLADE FAILURE APPEARS TO BE REMOTE. A COMPLETE
STROPHIC RESULTS.

RAGE TWO RUMFHOLPAJ UNCLAS E F T O

4. AT THE 000100Z JUN 69 OF PLANE GUARD DESTROYED WEIRD EYE WITNESSES
BOTH OBSERVED DEBRIS COMING FROM ROTOR SYSTEM PRIOR TO IMPACT
EST 4 OR 5 INCHES WIDE LARGE ENOUGH TO BE A WHOLE BLADE. ONE
OFFICER OBSERVED DEBRIS ACTION AS HIGH AS 60-70 DEGREES. PRIOR
TO IMPACT SEQUENCE OF ABOVE EVENTS UNKNOWN.

5. INFO PROVIDED HERE ABOVE THIS MSG IS EXTENT OF FACTS. INTEND
TO PROVIDE SUMMARY OF ACCIDENT BOARDS COMMENTS AS SOON AS THEY
ARE AVAILABLE.

RT

10041 24 NOV 1969 1400Z 14 NOV 1969 1400Z 14 NOV 1969 1400Z

NNANZCZCNASC85#PTTBZYI
ZNY EEEEE
P R 23JU50Z AUG 63
FM COMFAIRFAK PAC
TO RUMFHCL/ USS BON HON
INFO RUADMSA/ COMFAIRFB
ZENI/ COMFAIRSDIEGO
RUWJMTA/ HEL SUPPRON ONE
RUCILSA/ NAVSAFECE

W	O	R	M	N	S	J	A	S	J	O	N	D	E	F	G	H	I	J	K	L	M
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
23	24	25	26	27	28	29	30	31													
31																					
CLINICAL NUMBER												R250									
D. RICHARD <i>(initials)</i>																					
SPAC																					
UNIT 9-582 DATE																					
23 AUG 65																					
035	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

UNCLAS E F T O
HEL SUPPRON ONE DET THREE ONE
A. YOUR 121231Z AUG 63
IN UTAH ON UH-2C BUNO 149767

- B. YOUR 141159Z AUG 69

1. REF A STATED CAUSE OF ACCIDENT UNKNOWN. HOWEVER PILOT THOUGHT A
MAIN ROTOR BLADE CAME OFF. REF B. REPORTS SUSPECT FAILURE SOMEWHERE
IN FLIGHT CONTROL SYSTEM.

2. REQ THE FOLLOWING INFO BE FORWARDED TO THIS HQQTRS PERTAINING
TO SUBJ UH-2C LOSS:

A. ANY ADDITIONAL INFO TO SUBSTANTIATE OR REFUTE POSSIBILITY
OF BLADE FAILURE.

B. SER NR OF ALL MAIN ROTOR BLADES.

PAGE TWO RUWJMUA9373 UNCLAS E/F TO

C. STATUS OF AF C-172 INCORPORATION ON BUNO 149261

81

1437A

NNNNMCZ FRL NOONVRCZOSLBD16A
 PTTEZYUN RUMFHCLAISS 226159-EFFF--RUCILSA.
 Z NY SEEE ZYD RUMFSH
 P R 141159Z AUG 69
 FM USS BON HOMME RICHARD
 TO RUENAAA/ONO
 RUCILSA/NAVSAFECEN
 RUWJMTA/HELSUPPRON ONE
 RUWJMUA/NAV51RSYSCOMREPAC
 INFO RUEBBHB/NAVAIRSYSCOM
 RUMFZFF/CTF SEVEN SEVEN
 ZEN/CTG SEVEN SEVEN PT ZERO
 RUADMSA/COMFAIRWESTPAC
 RUMMVIA/DEP COMFAIRWESTPAC
 RUWJMUA/COMNAVAIRPAC
 RUWJMUA/COMFAIRSDIEGO
 RUCILMA/COMNAVAIRLANT
 RUCIRNA/NAVPLANTREPO KAMAN ACFT
 RUEBBHB/CHNAVMAT
 RUHHBRA/CINCPACFLT
 RUWJMTA/HELSUPPRON FIVE
 RUADMSA/HELSUPPRON SEVEN
 RUMMVIA/HELSUPPRON SEVEN CUBI
 PAGE TWO RUMFHCLAISS UNCLAS E F T O
 RUMEZ FF/USS KITTY HAWK
 RUHGBMU/USS TICONDEROGA
 RUHGTBT/USS ORISKANY
 RUHPVLD/USS HANCOCK
 RUHDNUL/USS CONSTELLATION
 BT

UNCLAS E F T O FOR OFFICIAL USE ONLY
 NAVY SUPPLEMENTARY MESSAGE RPT OF AIRCRAFT ACCIDENT
 A. BON HOMME RICHARD 101531Z AUG 69
 B. ORNAVINST 3750.6B
 1. 10 AUGUST 1969 1636H DAY
 2. PLANE GUARD PATTERN YANKEE STATION WATER DEPTH 230 FEET
 3. UH2C 141159Z
 4. HC-1 DET 31 AAR 1-700
 5. ALFA, LOST AT SEA
 6. FIRST CREWMAN ADJ2 JERRY VANLANDINHAM, USN, B30 OF ASBRAVO
 INJURY, SVM MED IVAC TO US NAVAL HOSPITAL SUBIC BAY D AGNOSTIC
 COMMUNICATED FRACTURE LEFT HUMERUS. PATIENT AMBULATORY AND MOBILE
 TO OTHERS
 7. FIRST LINE PARA IN RER A SHOULD READ 50 FT
 8. NO FURTHER INFO AVAIL. SUSPECT FAILURE SOMEWHERE IN FLIGHT
 CONTROL SYSTEM. INVESTIGATION BY ACCIDENT RD IN PROGRESS.
 BT
 10156

SUPP AAR

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31															
TOR																																															
INIT.																																															
BLOOMFIELD CONN																																															
DATE																																															
05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
12	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

1. 10 AUGUST 1969 1636H DAY
 2. PLANE GUARD PATTERN YANKEE STATION WATER DEPTH 230 FEET
 3. UH2C 141159Z
 4. HC-1 DET 31 AAR 1-700
 5. ALFA, LOST AT SEA
 6. FIRST CREWMAN ADJ2 JERRY VANLANDINHAM, USN, B30 OF ASBRAVO
 INJURY, SVM MED IVAC TO US NAVAL HOSPITAL SUBIC BAY D AGNOSTIC
 COMMUNICATED FRACTURE LEFT HUMERUS. PATIENT AMBULATORY AND MOBILE
 TO OTHERS
 7. FIRST LINE PARA IN RER A SHOULD READ 50 FT
 8. NO FURTHER INFO AVAIL. SUSPECT FAILURE SOMEWHERE IN FLIGHT
 CONTROL SYSTEM. INVESTIGATION BY ACCIDENT RD IN PROGRESS.
 BT
 10156

HNNNZCZ/CNASCAB6A
 PTTEZYUW RUMFHCL0172 2221531-PESE--RUCILSA.
 ZNY EEEEF ZYD RUMFESHH
 P R 101531Z AUG 69
 FM USS BON HOMME RICHARD
 TO RUEAADA/CNO
 RUCILSA/NAVSAFECEN
 RUMJMTA/HELSUPRON ONE
 RUMJMUA/NAVAIRSYSCOMREPAC
 INFO RIUEBIR/NAVIRSYS COM
 RUMEZFF/CTF SEVEN SEVEN
 ZE V/CTG SEVEN SEVEN PT ZERO
 RUADMSA/COMFAIRWESTPAC
 RUMMMDAZ/DEPCOMFAIRWESTPAC
 RUMMMUA/COMNAVAIRPAC
 RUMJMUA/COMFAIRSDIEGO
 RUCILMA/COMNAVAIRLANT
 RULYSAO/NAVPLANTREPO KAMAN ACFT-BLGB4/FLH-2-COTIN
 RUEBRHBT/CHNAVMAT
 RUHHBRA/CINGPACFLT
 RUMJMTA/HELSUPRON FIVE
 RUADMSA/HELSUPRON SEVEN
 RUMMMDAZ/DET HELSUPRON ONE CUB I
 PAGE TWO RUMFHCL0172 UNCLAS E F T O
 RUMMMDAZ/HELSUPRON SEVEN CUB I
 RUMEZFF/USST KITTY HAWK
 RUHGBMU/USST L CONDERROA
 RUHGTBI/USST ORISKANY
 RUHWDLD/USST HANCOCK
 RUWNSIG/USST CONSTELLATION
 BT
 UNCLAS E F T O FOR OFFICIAL USE ONLY
 NAVY BRIEF SUMMARY MESSAGE REPORT OF AIRCRAFT ACCIDENT
 A) ORNAVINST 3759.5R
 1. 12 AUGUST 1969 1636H DA
 2. PLANE GUARD PATTERN 10 DEGREES (AUXN 107 DEGREES)
 3. 250 FEET
 4. UH2C 139757 PAGE NO 1 OF 2 172100Z AUG 69

AAR - STRIKE

00	01	011	012	013	014	015	016	017	018	019	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01V	01W	01X	01Y	01Z	01A	01B	01C	01D	01E	01F	01G	01H	01I	01J	01K	01L	01M	01N	01O	01P	01Q	01R	01S	01T	01U	01

4. NO-1 DET 31 MAR 1-70
5. ALCA. LOST AT SE
6. LT [REDACTED] (b) (6)

FILDT [REDACTED] TOTAL TIME IN MODEL 500 SP. LAST 70 DAYS 400.3
7. COPILOT LTJO LOVELL, JOHN R. 710541 1012 USN ACTIVE DOLF INJURY
FIRST CREWMAN AD 12 JERRY VANANTINHOUT 1000 1016 DD AS RIVALD INJURY
BROKEN LEFT ARM SECOND CREW AN (b) (6) [REDACTED] USN, BSI 24-30

PAGE THREE RUMFHCLB172 UNCLAS E F T O

8. NONE

9. PLANE GUARD

10. APPROACHING HOVER IN PLANE GUARD STATEMENT
11. WHILE APPROACHING A HOVER AT SH ELLIOT ABOUT SP KTS AIRCRAFT
LURCHED VIOLENTLY TO RIGHT FOLLOWED BY OPPOSITE CYCLIC BY PILOT
AIRCRAFT THEN LURCHED VIOLENTLY TO LEFT AND ENTERED THE WATER IN
ABOUT A 90 DEGREES LEFT WING DOWN ATTITUDE. AIRCRAFT ROLLED INVERTED.
ALL FOUR WERE RESCUED BY PLANE GUARD DESTROYER USS J. H. THOMASON
DD 750. SUBSEQUENTLY RETURNED TO BON HOMME RICHARD BY U-2C FROM
USS KITTY HAWK.

12. WIND 23P/17 SEA STATE MODERATE CEILING 16,000 BROKEN VIS 10
MI AT TEM 85 WATER TEMP 84.9

13. NONE

14. CAUSE OF MISHAP IS UNKNOWN HOWEVER PILOT STATED HE THOUGHT
A MAIN ROTOR BLADE CAME OFF X FROM A PLANE'S AFT DESTROYER CLAIMED
THEY SAW SOMETHING FLY OFF FROM MOTOR HEAD. NOT ALL REPORTS AND
STATEMENTS HAVE BEEN RECEIVED.

15. NA

16. NO RECOMMENDATIONS. OTHER AIRCRAFT RECEIVING COMPLETE INSPECTION
PAGE FOUR RUMFHCLB172 UNCLAS E F T O

17. LCDR (b) (6) III USN-DIVC

RT

#172

PAGE NO. 2 OF 2

PAGE 101931Z